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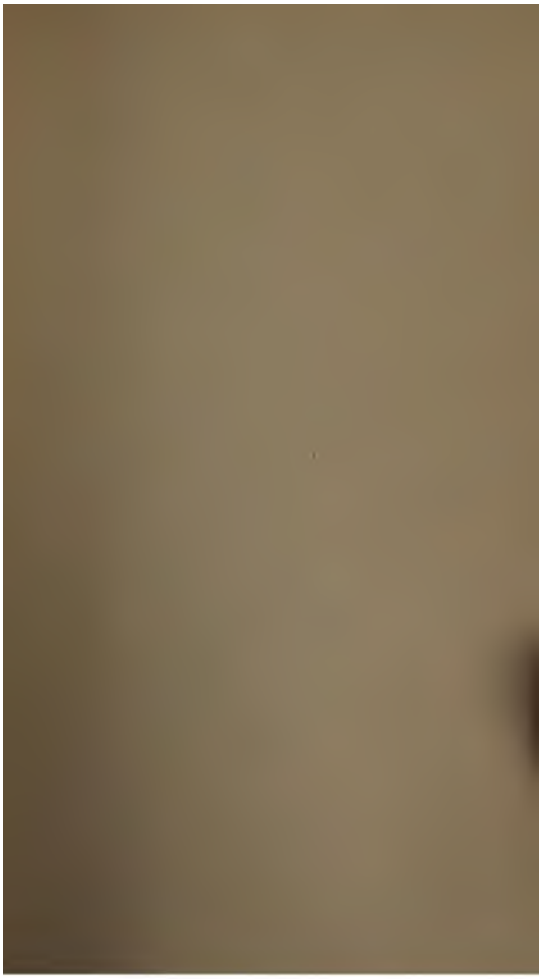

THE

WONDERS

OF

ATURE AND ART;

OR,

A CONCISE ACCOUNT

OF

ATEVER IS MOST CURIOUS AND REMARKABLE

IN

THE WORLD;

ither relating to its Animal, Vegetable, and Mineral Productions, or to the Manufactures, Buildings, and Inventions of its Inhabitants,

piled from Historical and Geographical Works of established thority, and illustrated with the Discoveries of modern Travellers.

By the Rev. THOMAS SMITH,

ior of the UNIVERSAL ATLAS, SACRED MIRROR, &c. &c.

" Review these numerous scenes, that wide survey,
Nature's extended face, then Sceptics say,
In this wide field of wonders, can you find
No art discover'd, and no end design'd ?"

VOL. I.

LONDON:

TED FOR J. WALKER, NO. 44, PATERNOSTER-ROW; J. [illegible] CORNER OF ST. PAUL'S CHURCH-YARD; VERNOR [illegible] HOOD, IN THE POULTRY; T. HURST, PATERNOSTER-[illegible] AND CROSBY AND CO. STATIONERS'-COURT.

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PREFACE.

) curiosity, which is, in a greater or less de-
, implanted in the breast of every reasonable
ig, we stand indebted for the most important
overies, the happiest improvements, and the
itest blessings of civilization. It is this which
given life and energy to the Arts, and
wed the rugged paths of Science with unfad-
flowers; to this we owe the matchless bene-
of commerce and navigation; and in the future
ification of this passion, if properly directed,
may expect to reap many solid advantages.
he mind of man, conscious of its divine origin,
proud of its superiority in the scale of Crea-
is ever busied in the pursuit of knowledge,
the investigation of those numerous objects
which it is surrounded. The embroidered
, the wide extended seas, and the beauteous
of heaven, afford ample scope for medita-
the mind that is neither biassed by pre-

99X677

judice, nor contaminated with the doctri
fidelity will ever experience a rapturous
reflecting on the wisdom, power, and g
that Adorable Being for whose pleasur
and were created.

In the Work now presented to the
is humbly hoped that instruction will
blended with amusement, and that the
of the Editor and the Proprietors to grat
tional curiosity of their readers, and t
the interests of religion and virtue, w
the *Wonders of Nature and Art* worthy c
patronage and approbation.

Few subjects can be more generally
ing, and none more innocent than th
occupy the ensuing pages. To spend
hour in the contemplation of our te
globe, and its multifarious productions;
the various shades and peculiarities whi
guish its animal, vegetable, fossil, anc
tribes; to review the magnificent build
singular inventions, and advantageous
tures of different nations; and to inves
noblest and most curious remains of antiq
indisputably be advantageous to the un
and entertaining to persons of all descri
riety, which is so universally admir

anxiously sought after, is a distinguishing characteristic of this compilation. The gloomy mansions of the subterraneous cave, the solemn aspect of the foaming cataract, and the tremendous eruptions of the volcanic mountain, successively demand peculiar attention; but this scenery is frequently enlivened by the introduction of architectural magnificence, or interesting mechanism; and the eye is invited to repose on hortulan beauties, and agricultural improvements. The winged inhabitants of the grove, the numerous quadrupeds that scour the plain, and the most remarkable fishes that cleave the yielding waves, are occasionally brought forward to grace our little cabinet; the bowels of the earth are explored in quest of interesting objects; and even the tombs of the illustrious dead are sometimes visited to augment the general store of instructive intelligence.

In forming an assemblage of this description, it has been indispensibly necessary to examine a prodigious number of volumes, which few persons, comparatively speaking, have ability to purchase, and fewer have leisure to peruse; to reconcile the contradictions of different authors; to distinguish, according to the best of our ability, between truth and falsehood; to render the style uni; and to reduce a chaotic mass of mate-

rials into a regular arrangement. Sooner
deed, we have been enabled to gather a
of articles from one author, and, when c
with our plan, have allowed him to spea
own language; but very frequently have
compelled to wander through a literary la
in quest of curiosities, and to spend ma
in the selection of few particulars. T
laborious parts of our task, however, ha
agreeably cheered by the hope of adding
ceptable tribute to the stock of harmless e
ment, and of being honoured with the ine
approbation of a British Public.

To enumerate all the writers from wh
have borrowed in this compilation, woul
dious and unnecessary, as many of the
are occasionally mentioned. Suffice it t
to say, that we have uniformly had rec
historical and geographical works of the m
blished celebrity, and to the voyages an
of gentlemen whose generous exertions a
rary labours have been crowned with c
applause. To the Asiatic Researches, a
losophical Transactions, we are also inde
many interesting and truly curious particul

The utility of copper-plate engraving
obvious to require explanation. By the

class of readers they are universally admired; and persons of maturer years are enabled to form a more accurate idea of certain objects by the assistance of the pencil, than they could possibly receive from mere verbal description.—The series of plates which embellish the following work, have been prepared from respectable authorities, at a considerable expence, and will be found illustrative of the most interesting subjects.

Needless repetitions have been sedulously avoided; but if the reader should sometimes meet with them, it is hoped he will have the candor to recollect that the same animal, vegetable, or fossil, may very possibly be mentioned under various names in different countries. On the subject of buildings, antiquities, &c. we must also crave indulgence; for, although great exertions have been made to ascertain their *present* state, they are so frequently altered, and so liable to decay, that a description which a few years ago was precisely correct, might now be deemed erroneous or defective. France, in particular, has undergone many striking changes.—The temples of God, and the palaces of princes have, in many places, been stripped of their richest treasures; the most exquisite statues and paintings have been roved, or removed from their original station

and many splendid edifices, which [illegible] cited the warmest admiration of foreigners, [illegible] been overthrown by the iron hands of anarchy rebellion.

That enquiries into the Wonders of Natur commendable in themselves, and conducive t interests of true religion, every reasonable must necessarily acknowledge; for they act answer the ends for which the Creator empl his infinite skill, and for which he endowe with the blessings of reason and perceptio The poor untutored Indian who never hea our blessed Redeemer, nor listened to the c liating voice of the gospel, still acknowledge existence of a Great Supreme, and bows the in humble adoration, while he contemplates sun walking forth in its brightness, or the r and the stars which God hath ordained. with respect to ourselves, the more attentivel survey the wonders even of our own island, more we must be induced to admire the wis and reverence the power of that Adorable B who not only stretcheth out the heavens as a tain, and spreadeth them out as a tent to d in, but who also crowneth the earth with his ing kindness, and filleth all things living with j ousness.

lost High, the consideration of them may also serve to inculcate on our minds the necessity of obedience to the divine laws, and to warm our hearts with the most fervent gratitude, which his unremitting mercies demand, and to which he is entitled by his rights of creation and dominion.

In a work of this kind it is not improbable that many particulars may be omitted, which some persons may rank among the curiosities of nature, and that others may be inserted which seem less important; for out of such a prodigious number of remarkable objects as the world affords, some may easily escape our notice, and others may appear to us more interesting than in the eyes of those to whom they are more familiar. In general, however, we have endeavoured to select such subjects as have been deemed worthy of notice by the most judicious travellers and historians.

Notwithstanding the diversity and multiplicity of objects contained in the following sheets, we have arranged them in such a manner as appears the most easy, natural, and entertaining. The principal division consists of four general parts, Europe, Asia, Africa, and America; these are subdivided into chapters, containing an account

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WONDERS

OF

NATURE AND ART.

PART I.

EUROPE.

CHAP. I.

OF GREAT BRITAIN AND IRELAND.

Caverns, Springs, &c.

THE Peak of Derbyshire is so universally celebrated on account of its natural curiosities, and has been so frequently noticed by intelligent tourists, that it seems to demand priority in a work of this kind: here, therefore, we shall commence our description of those Wonders of Nature, which, it is humbly hoped, may either instruct, amuse, or refresh the minds of our readers.

Hidden Hole, one of the principal wonders of the Peak, was formerly represented as perfectly pestilential, and teeming, at a certain depth, with such noxious air, that no person nor animal could respire it without inevitable destruction. It was affirmed, more than a century ago, that birds

[redacted]
without finding a bottom; and it is
fidently asserted that a poor man was
down in a basket, to the depth of
yards, and that, on being drawn up a
in a state of delirium.

In the sixty-first volume of the
Transactions, however, is the account
made into this excavation by a Mr.
relates, that for the first sixty feet, h
somewhat obliquely, and that the
became difficult from craggy projec
sides. At the depth of thirty feet n
flection of his rope varied very consi
the perpendicular; and, after passin
damp moss-grown chink, about three
the rock opened on the east, and he s
reached the bottom of the cave, whi
sixty-two yards from the mouth. F
scription given by this gentleman, it
the interior of the chasm consists o
oven, and the other like
house, communicating with e
vaulted passage. On the sout
cavern is a smaller opening,
long, and six high, lined thro
of stalactite of a fine yellow
to the first entrance is a colu
incrustation, ninety feet high. After
ascent, and descending wit
toward the north, Mr. Lloyd
a small cavern opening into the side
the roof of which was adorned with
number of pendent stalactites. The
largest opening are said to be lined w

ns of three kinds: the first, a deep yellow lactite; the second, a thin coating, resembling light stone-coloured varnish; and the third, a igh efflorescence, the shoot of which bears the nilitude of a kind of rose-flower. The assertions several miners who have been questioned reecting the depth of this cavern, correspond as arly as possible with the account given by Mr. loyd; so that the former tales of its being utterly thomless, &c. must have resulted from the unilfulness of the persons who undertook to plumb , or from some other gross mistake.

Poole's Hole, said to have derived its name om a notorious robber, who secreted himself ere from justice, is a stupendous cavern at the ot of a mountain near Buxton. The entrance is xtremely low and narrow; but it gradually opens to a spacious and lofty concavity, like the interior of a Gothic cathedral. In a cavern to the ight, called Poole's chamber, is a curious echo; nd the sound of a rapid stream which runs through he great vault produces a fine effect. The innuerable drops of water which depend from the oof and sides are also worthy of admiration; for hey not only reflect innumerable rays from the ights carried by the guides, but, being of a petriying quality, they form many fanciful resemlances of men, lions, dogs, and other animals, nd of organs, lanterns, and flitches of bacon. The queen of Scots' pillar, said to have taken its ame from a visit of the unfortunate Mary, during er abode at Chatsworth, is clear and bright like labaster, but probably partakes more of the naure of spar, with which the circumjacent coun- rabounds. This pillar is the boundary of most s curiosity; but there is a steep ascent for

[redacted]
Eye, [redacted]
like a star peeping from a cloudy sky.

The entrance to another cavern, [illegible] Devil's Hole, is extremely magnifice situated in a gloomy recess, between t of perpendicular rocks; and having c a rivulet, which issues from the cave, a its foaming course over craggy and brol of limestone. A vast canopy of rock mouth of this stupendous excavation, a the appearance of a depressed arch, tends one hundred and twenty feet in w two in height, and about ninety in depth.

At the first entrance, a spectator is s find that a number of twine-makers l lished their residence and manufactory tremendous gulf; and the combinatio rude appearance and machines with tl features of the natural scenery impresse with an indescribable emotion of awe. ceeding about ninety feet, the roof beco and a gentle descent conducts, by a rock, to the interior entrance, where t day wholly disappears, and all further is pursued by torch-light.

passage now becomes extremel visitor is obliged to proceed ab a stooping posture: but on hi an opening, called the Bell-h enabled to stand upright, and without inconvenience, to the brink where a small boat is ready to convey interior of the cavern, beneath a ma

ops within twenty inches of the surface
er.

this lake is a spacious vacuity, about
red and twenty feet long, two hundred
id, in some parts, a hundred and twenty
but, from the want of light, neither the
distant sides of this vast abyss can be
cerned.

e termination of a shallow stream, called
nd Water," is a projecting pile of rocks,
oger Rain's House," from the circum-
water incessantly dripping from the
f the roof. Beyond this, opens another
is hollow, called "The Chancel," where
appear much broken, and the sides are
overed with stalactical incrustations
stranger is generally surprised by an in-
al concert, which bursts in discordant
the upper region of the chasm: "Yet,"
pectable tourist *, "being unexpected,
g from a quarter where no object can
n a place where all is still as death, and
to impress the imagination with solemn
m seldom be heard without that mingled
f awe and pleasure, astonishment and
hich is one of the most interesting feel-
mind." At the conclusion of the strain,
ers (consisting of eight or ten women
en) are seen ranged in a hollow of the
it fifty feet above the floor.

assing "The Devil's Cellar," and "The
use," (neither of which are particularly
observation) the visitor proceeds beneath
ral arches to a vast concavity, which,

* Mr. Warner.

from its resemblance to a bell, is called "
Tom of Lincoln." From this point the vaul
dually descends, the passage contracts, a
length leaves no more room than is sufficie
the passage of the stream, which continues to
through a subterraneous channel.

The entire length of this wonderful cave
two thousand, two hundred and fifty feet, a
depth, from the surface of the mountain, abou
hundred and twenty. A curious effect is
duced by the explosion of a small quantity of
powder, wedged into the rock in the int
of this cave; for the sound appears to roll a
the roofs and sides, like a tremendous and
tinued peal of thunder. The effect of the l
on returning from these dark recesses, is
ticularly impressive; and the gradual illumin
of the rocks, which become brighter as the
proach the entrance, is said to exhibit one o
most interesting scenes that ever employed
pencil of an artist, or fixed the admiration
spectator.

Okey Hole, near Wells, in Somersetshire,
curiosity of the same nature as that we hav
ready described. It is about six hundred
long, and the roof in the highest part is a
forty feet from the ground, but in some place
so low that a man cannot stand upright u
The people who act as guides point out so
imaginary figures of men, women, dogs, l
&c. which have been formed by petrifac
A current of water runs through the middle o
cave, in which trouts and other fish have been
quently observed. The echo is extremely g
and the place, taken all together, seems awfu
tremendous.

Donald Mill Hole, situated in the middle of a
nmon, about five miles from Lancaster, claims a
tinguished place amongst curiosities of this de-
iption. A brook, which turns a corn-mill at a
all distance, runs in at its mouth, by several
autiful cascades, continuing its course for nearly
o miles under a large mountain, and re-appear-
; near the village of Carnford. The entrance of
s cave is remarkably grand and solemn: the
st descent is about ten yards perpendicular, and
n only be effected by clinging to the protuberances
the rock and some stunted trees; but the road
then tolerably level, and the visitor is agree-
)ly amused by the grandeur of the cavern, the
earness of the echo, and the fine effect of the
ream which falls from one rock to another, with
sort of harmony well adapted to the place.
he vaults, like those in Derbyshire, are in some
laces very lofty, and in others extremely low.
he rays of a candle form the most romantic ap-
earances on the variegated roof, and the sides are
ot less remarkable; as the damps, the creeping
egetables, and the veins in the marble, exhibit as
any tints as are seen in the rainbow, and are co-
ered with a perpetual varnish by the springs that
owly trickle from the roof. Nature has certain-
thrown together in a very uncouth manner those
ge rocks which compose the arch over the en-
ance; but she has clothed it with trees and
ubs of the most beautiful verdure, which bend
wnwards, and effectually hide all deformities.

obin Leith's Hole, near Flamborough Head,
a cavern, to which there is a narrow pas-
m the land side; but suddenly rising to a
able height, it displays a fine vaulted
aile the bottom, for a considerable way, is

formed in broad steps. The mouth ope
sea and illuminates the whole.

In a chalky cliff, near the castle of G
in Surry, is an extensive and curious s
verns, the first of which is about forty
long, and ten feet high. To the north a
are two vaults of much larger dimensio
narrow passage running eastward, lea
other cavities, which are said to be one
feet long, and, in some parts, extreme
The entrance to this remarkable place, l
is now entirely closed up by chalk.

Barn's Hole, in the Isle of Wight,
chasm fronting the sea, which extends a
able way towards Brixton. The entrar
to lead to some subterraneous retreat;
are four hundred feet high, and dismal
and the whole spot is so extremely st
scarcely a single shrub clings to its steep

The Cave of Fingal, in the island of S
probably one of the most magnificent that
been described by travellers. "The mi
Mr. Pennant, "can hardly form an ic
magnificent than such a space, supported
side by ranges of columns, and roofed b
toms of those which have been broken of
to form it; between the angles of whic
low stalagmitic matter has exuded, whi
to define the angles precisely, and at
time vary the colour with a great de
gance. To render it still more agree
whole is lighted from without, so that th
extremity is very plainly seen; and the a
ing agitated by the flux and reflux of

* One of the Hebrides.

erfectly wholesome, and free from the damp
ors with which caverns generally abound."
The cavern of Dunmore Park, near Kilkenny,
reland, descends about ninety feet perpendi-
rly from the summit of a small hill, through an
ning of forty yards in diameter. The sides
composed of lime-stone, and occasionally
hered with shrubs. When the inspector has
cended to the bottom, he sees one side of the
supported by a natural arch, about twenty-
yards wide, and at the same time perceives
o subterraneous openings to the right and left.
ne turn to the right he must make his way over
eral rugged rocks, which are incrusted with
r, in the most whimsical shapes, and variegated
th the wildest assemblage of colouring. Many
cle shaped cones depend from the roof, and
ving in many parts met the rising stalactites,
m a number of fantastic appearances, like the
lars of a Gothic cathedral, organs, crosses, &c.
Mr. Adam Walker, in a letter to Dr. Morton,
cretary to the royal society, has made the follow-
g observations on this remarkable place.—"The
ene is indeed both pleasing and awful: the can-
es, burning dim from the moisture of the air, just
ved to show a spangled roof, perpetually var-
hed with water, and in some places upwards
twenty yards high: in other parts we crawled
all fours, through cells that will admit but
e person at a time. After having scrambled
out five hundred yards through the right side of
ve, we returned to day-light, and proceeded
ow the left side. This branch is not so hori-
al as the other; it inclines downwards, and
enings are much larger, some being up-
of a hundred yards wide, and above fifty

yards high. In a standing part
a quarter of a mile from the entra
great number of human bones,
were very large, but when take
ter, they crumbled away. As
thing like an inscription, or ea
place, we conjectured that some
might have driven the owners
this melancholy retreat."

Many of the rocks on the side
cavern are black marble, prettil
white spots; and the circu
abounds with quarries of this
which takes a fine polish, and i
for slabs and chimney-pieces.

At East Tilbury in Essex, near
Thames, there is a chalky cliff,
of caverns about twelve feet hi
dimensions; they are skilfully
and are supposed to have been us
Britons, either as granaries,
time of invasion. Similar cells
found near Crayford in Kent,
sixty to a hundred and twenty fe
at the mouth, and wide at botton

In a rock near Wetherall, a vi
land, are several of these curiou
sisting of two rooms, one within
about eighteen feet square; a
there is a grotto of two rooms du
rock, and called Isis Parlish. T
a place of great strength, and th
to it was formerly secured with i

The town of Nottingham d
from a Saxon word which signifi
with caverns, or subterrane

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a such caverns being found cut into apart-
ts, with chimneys, windows, and other con-
encies, at the bottom of a steep rock under the
n. One of these cells is remarkable for the
ory of our Saviour's passion, cut out by David
ing of Scotland, who was confined in Not-
ham castle; and a winding stair-case leads to
cond cavern, called Mortimer's Hole, from a
osition that Roger Mortimer, earl of March,
ealed himself in that place, previously to his
g seized by Edward III.

lam Tor, or Mother Hill, is reckoned among
wonders of Derbyshire; because the country
ple assert, that it continually moulders away,
produces other hills at the bottom of it, but
ot at all diminished itself. The fact is simply
: on one side of the mountain is a very large
steep precipice, the substance of which, be-
a loose earth mingled with small stones, is
inually crumbling and falling down, some-
s in large quantities, when washed off by heavy
s, and thus contributes to raise a hill at the
of it, the increase of which is easily perceived,
igh the great mountain is not sensibly dimi-
ed. The perpendicular height of this moun-
is said to be one hundred and forty yards.
ut half way up it is covered with brushwood,
the upper part is almost bare and inacces-
e.

uxton Wells, besides their medicinal virtues,
e this surprising particular, that within five
of one of the hot springs, there arises a cold
. The water is sulphureous, and contains a
ll quantity of saline particles, but none of vi-
ig so that it is not fetid, but more palatable
most other medicinal waters. Its heat is

equal to that of new milk, procuring a
perspiration; and is remarkable for g
laxing the solids, so as instantly to take of
ness and wearinesss occasioned by a
These waters are often recommended
cians, both for drinking and bathing, in s
rheumatic, or nervous disorders. That t
highly esteemed in the time of the Ron
pears from a high road or causeway,
ruins of an ancient Roman bath, which
discernible. A large and convenient h
been erected here for the reception of s
the bath-room is arched over head, an
people may bathe in it at a time. Be
principal springs at the village of Buxto
are many others that rise unregarded
neighbouring enclosures, and on the sid
hills, so that their number can scarcely
tained.

The last wonder of this kind is Tide
Weedenwell, a spring which, according
writers, ebbs and flows regularly like the
however is a mistake, for although it certa
ebb and flow, it is at very unequal perio
times not once in a day or two, and s
twice in an hour. The bason of the spring
a yard deep, and the same in length and
When it flows, the water rises with a
noise, as if the air, which was pent u
the cavities of the rock, were forcing its
sage by driving the water before it; or
the spring may, occasionally, receive an
dinary supply from the overflowings of so
ral body of water, lying upon a higher l

At the village of Matlock, upon the
the Derwent, ten miles to the north

erby, are several warm springs, called Matlock Vells. To accommodate those who are directed use them externally, a bath has been construct-l, inclosed in a proper building, lined with ad, and large enough to receive eight or ten peo-e at a time, who descend into it by steps made r that purpose. The water that supplies this ath, issues from a rock in a most delightful plain, out a mile in circumference, surrounded by cky hills, and a rapid stream. As these waters e said to attenuate, heat, and rarify the blood, d the external use of them is strongly recom-ended in the rheumatism, and all disorders of the in, they are much frequented; and would be ore so, were it not for the want of accommoda-ns on the spot, and the stony mountainous road at leads to them.

Bath, in Somersetshire, is universally known a place of resort for our nobility and gentry at rtain seasons, not only for the cure of diseases, t for gallantry and diversion; and its hot rings have acquired general celebrity. The st renowned of these lie near the cathedral, and collected into a square area, called the King's th, about fifty-seven feet long, and forty broad, th a neat building before it, called the Pump-om, for company to meet in who drink the ter, which is conveyed thither by a pump from bottom of the springs, where it is almost boil-hot *. The walls of the bath are full of niches, aps the work of the Romans. There is also a

* It is remarkable, that at the cleansing of the springs, fibers of hazle nuts are constantly found, which pposed to be the relicks of the universal deluge: leaves, like those of olives, come sometimes out e pump of the Hot-Bath.

[illegible] into it at every corn
the south wall of this bath is another,
Queen's-Bath, which is a smaller sq
twenty-five feet long, and twenty-four
Its water, being borrowed from the fc
a more moderate warmth.—In the sout
of the town are two other baths; one
Hot Bath, which is an oblong square,
in length, and thirteen in breadth; anc
the Cross Bath, which is of a triangular
received its name from a * cross that
stood in the middle of it. The overfl
this bath forms another for poor peopl
cold bath has also been erected, by cont
at a spring beyond the bridge.

In the King's Bath there is a figure of k
dad, with an inscription, intimating, t
found out the use of these springs three y
fore the coming of our Saviour. But thou
cannot give entire credit to this inscriptio
certain they were famous for their medici
tues in the time of the Romans. Ptolen
them the Hot Waters, and Antoninus m
them under the title of Waters of the Sun
influence of which luminary their heat w
posed to be owing; but there is a much n
tional way of accounting for this, as well
other qualities. Almost every one know
heat in any degree may be produced by a
mixture of sulphur and filings of iron, mc
with common water. Now the hills whe

* The water of the Cross Bath corrodes sil
and the Bath waters in general will prey u
seem to have no sueh effect upon brass.

h waters flow, contain a large quantity of sul-
reous matter and iron ore, which, impregnat-
the water as it passes through them, give it that
t, milkiness, and detergency, which it so
nently possesses.

t is supposed, that for many hundred years,
se waters were used only externally, by way
athing; but of late, the internal application of
m has been found of extraordinary service in
ny cases. They have a sulphureous and steely
e, and are extremely grateful to the stomach,
ating no heaviness or nausea, but exhilirating
spirits, and procuring an appetite. In restor-
decayed constitutions they are of surprising
cacy, as they strengthen the bowels, and re-
w the vital heat. In a word, if they are not
en in too large a quantity, and a proper regi-
n be observed, they are capable of perform-
wonders; though sometimes, for want of care
these respects, the use of them is attended
h ill consequences, and their credit is unjustly
led in question.

The Hot-Well, or water of St. Vincent's Rock
r Bristol, must not be passed over in silence.
is spring formerly lay open at the foot of the
k, and was covered by the salt water every
e; but the well is now secured, a good pump
ed in it, and a handsome house built, for the
tertainment of distempered persons. This water
f great service in the first stages of a consump-
n, and corrects the acrimony of the juices, being
soft alkaline quality, derived from the natural
atone with which it is impregnated. It is ob-
to retain it virtues longer than other medi-
waters, which makes the demand for it
ater by those who cannot have recourse to

the fountain-head; and vast quantities of accordingly sent in bottles to most parts rope.

The Spa waters of Scarborough in Yo are now so celebrated, that great numbers nobility and gentry resort thither annuall the place seems to rival even Bath itself. have an evident tincture of iron, vitriol, alu nitrous salt, to which last they owe their a quality. They agree best, however, wi sons of strong nerves, and firm constitution waters of Cheltenham, in Gloucestershi reckoned much of the same nature.

Here it may be proper to mention a rem accident that happened at Scarborough in I ber, 1737, whereby these famous waters h to have been entirely lost. The spring w ated at the foot of a high cliff, part of about two hundred and twenty-four ya length, and thirty-six in breadth, containing an acre of pasture-land, was suddenly rent the top of it, and having continued sinki several hours, at last settled about seventeer perpendicular below its former situation. pressure of such a vast weight, being som dred thousand tons, the earth and sand b owards the sea rose nearly twenty feet former level. The Spa-House rose wi but the water soon failed, and was after diligent search, the sprin discovered, and upon trial, its virtu peared to be rather increased than diminisl singular disaster.

naresborough, in the same county, wa much frequented, and is still remarka neral waters, of which there are four s

not far distant from each other, but very diffe in their nature and effects.—The first is the Sw Spa, or Vitriolic Well, discovered about the y 1620, and allowed to be a sovereign remedy some particular distempers.—The second is t Fœtid Spa, or Sulphur Well, the water of whi is clear, but so exceedingly nauseous to the sme that people are forced to hold their noses whe they drink it. It is said to be good for the dropsy spleen, scurvy, gout, rheumatism, and paralyti disorders, but is now chiefly used for bathing.— The third is a cold bath, called St. Mongah's, from a Scottish saint much honoured in those parts. —The fourth is the Dropping Well, the most famous of all the petrifying waters in England. It drops from a porous rock, and the ground upon which it has fallen, for twelve yards long, is now changed into solid stone. A little rivulet, that runs from this well, falls into the Nid, where it has formed a rock that stretches some yards into the river.

Tunbridge Wells, in Kent, are very famous for their good effects in cold chronical diseases, they strengthen the nerves and help digestion. In short, their virtues, and the pleasantness of the place, draw much company thither in the summer season.

There are several other springs in England remarkable for their healing qualities; but perhaps ere is no greater curiosity of this kind than the rning Well, at Ancliff, near Wigan in Lancare. The water itself, is cold, nor has it any ell; but a strong sulphureous vapor makes it ble up as if it boiled, and upon applying a ted candle to it, the surface of the well is cod with a flame, like that of burning spirits

This flame will continue several hours in calm weather, and emit such a heat, that meat may be boiled over it: but the water, when taken out of the well, will not burn at all.

In several parts of Cheshire are salt springs, particularly at Namptwich, Middlewich, and Northwich, which are called the Saltwiches; and also at Dinham, which is about six miles distant from each of the other towns. The depth of the pits seldom exceeds four yards, and is never more than seven. In two places in Namptwich the spring breaks out in the meadows, so as to fret away the grass; and a salt liquor ouzes through the earth to a considerable distance. These springs are about thirty miles from the sea, and generally lie along the river Weaver; yet there is an appearance of the same vein at Middlewich, near a little stream called the Dan. The water is so very cold at the bottom of the pits, that the briners cannot stay in them above half an hour at a time, nor so long, without drinking frequently strong liquors. Some of these springs afford much more water than others; but it is observed, that there is more salt in any given quantity of water drawn from the springs that yield little, than in the same quantity drawn from those that yield much. It is also very remarkable, that more salt is produced from the same quantity of brine in dry weather than in wet. Whence the brine of these springs is supplied, is a question that has never yet been finally determined: some have supposed it to come from the sea, but this is not probable, because a quart of sea water will produce no more than an ounce and a half of salt; whereas a quart of water from these springs will produce seven or eight ounces.

There is likewise a remarkable spring of sal water at Barton, near Omskirk in Lancashire where a quart of water will produce eight ounce of salt. In many parts of the coast of this county the inhabitants raise great heaps of sand, which after having lain some time, they put into trough full of holes at the bottom, pour water on it, and boil the lees into white salt.

Holy-Well, or St. Winifred's well, in Flint shire, is famous for the wonderful cures it has ef fected, particularly upon cripples, who have fre quently left their crutches there as monuments o their recovery. This fountain issues from a rock into a cavity formed like a bason or cistern, in which the patients bathe. The water is remark ably cold, and the stream so large and rapid, tha it turns several mills a little below its source. I is well known what extraordinary effects are pro duced by cold bathing; but many of the countr people believe that the cures wrought by this wel are miraculous, and that it owes its origin, accord ing to an ancient tradition, to the blood of a Chris tian virgin named Winifred, who was beheaded here by a Pagan tyrant.

Moffat Wells, which spring from a rock nea a town of that name in Annandale, are the mos remarkable medicinal fountains in Scotland There are two of them, not far from each other the uppermost of which runs through whitish stones resembling crystal, and the lower throug blackish ones of the colour of antimony. Thes waters are diuretic, emetic, and cathartic, an may be successfully used in the cholic, and som other disorders.

The Mole, a river of Surry, after running se veral miles from its source, disappears at the be

tom of Bodhill, near Darking, and passes ground into a place called the Swallow. river has been supposed to run two miles the earth to Leatherhead; but some authors opinion, that its stream is entirely lost Swallow.

We shall conclude this account of natural and springs with observing, that near Pen Glamorganshire, there is a promontory, Warmshead Point, which stretches about into the sea, and, at half flood, the isthmus which joins it to the main land, is overflow that it then becomes a small island. Towar extremity of this point, there is a small c in the ground, into which, if dust or sa thrown, it will be blown back again into th and if a person apply his ear to this cle will hear distinctly a deep noise, like th large pair of bellows: these phænomena are buted to the undulatory motion of the sea, the arched and rocky hollow of this promo which occasions an alternate inspiration and lation of the air.

METALS, MINERALS, &c.

How long the tin mines have been discovered or worked, cannot possibly be ascertained; but it is certain that the ancient Britons, if not the Romans, converted them to their advantage. Under the Saxons they appear to have been neglected; but after the coming in of the Normans, they produced very considerable revenues to the earls of Cornwall, particularly to Richard, brother of king Henry III. Several regulations were afterward made to encourage adventurers; a charter, and various immunities being granted by Edmund, earl Richard's brother, who also framed and ratified the * stannary laws, laying a certain duty upon the tin, payable to the earls of Cornwall. Edward III. confirmed the tinners in all their privileges, and erected Cornwall into a dukedom, with which he invested his son, Edward the Black Prince; and since that time, the heirs apparent to the crown of England, if eldest sons, have enjoyed it successively.

The working of the tin mines is extremely difficult, not only on account of the great depth to which the workmen are sometimes obliged to sink their shafts or pits, but also because the rocks through which a passage is to be cut, are so hard, that they can scarcely dig a foot in a week. The soft shaking earth found in these mines is also very troublesome, on account of the unwhole-

* These are laws relating to the tin mines, which from stannum, (tin) are called stannaries. There are five stannary courts in Cornwall, which have their respective jurisdictions, and as many towns where the tin must be coined or stamped with the seal of the duchy. When the legal duties are paid, the tinner may sell his tin where he thinks proper; but if the king, or the duke of Cornwall, wishes to purchase it, they may always claim pre-emption.

is combined and allayed with various substances; sometimes with base crystal, sometimes with a gravelly clay, and sometimes with the rust of iron; its figure is also very various, being sometimes in thin plates, shaped like leaves; sometimes in drops and lumps; sometimes branched, fringed or twisted into wires; sometimes crossed at the top like a dagger; and sometimes resembling hollow filligree. It has also been found in powder, little inferior in lustre to that of gold, in solid masses of several pounds weight, maturated, unmixed, and highly polished; and in a congeries of combined granules. The water in which the copper ore is washed, has been discovered to make blue vitriol of the best kind; and that which comes from the bottom of the mines, is so strongly impregnated with copper, that were it detained in proper receptacles, it would produce great quantities of malleable copper, without any hazard or attendance, and with little more charge than the purchase of a much less quantity of the most useless old iron; which being immersed in this water will, in about fourteen days, produce more than its weight of what is called copper mud, whence may be obtained a great proportion of pure copper.

There is another mineral found in the tin-mine called mundic, which the tinners formerly separated from the tin, because it made it thick and cundy; whence it was thrown aside and neglected. In the seventeenth century, however, Sir Gilbert Clark, and others, began to make trials, and found it afforded as good copper as that of Sweden; and the work is now brought to such perfection, that the copper extracted from this useless ore (as it was thought to be for many

it is fit for use.——The manner of making
s is this: the calamine being calcined, as
re, and reduced to a fine powder, is mixed
ground charcoal, and incorporated into a
s: thus prepared, about seven pounds of
mine are put into a melting-pot, and over it
ut five pounds of copper; which is let down
a wind-furnace eight feet deep, and having re-
ned there eleven or twelve hours, is converted
brass. After melting, it is cast into plates or
ps.

nother useful metal, of which our island af-
s no small quantities, is iron: this indeed,
respect to real usefulness is the most valuable
ll the metals, and is therefore the most com-
. It consists of an earth, salt, and sulphur,
all impure, ill-mixed, and ill-digested; which
lers it extremely liable to rust. It is the hard-
driest, and most difficult to melt of all metals.
y be softened, however, by heating it often in
ire, hammering it, and letting it cool of itself;
it is hardened by being extinguished in water.
l the iron works in England, those in the forest
an in Gloucestershire are in most repute.
ore is found there in great plenty, differing
in colour, weight, and goodness. The
called brush ore, is blueish, very ponder-
nd full of little specks that shine like silver.
affords the greatest quantity of iron, but if
d alone the metal is very brittle, and there-
ot so fit for common use. To remedy this,
ix with it a due quantity of cinder, (which
efuse of the ore after the metal has been
ed) and this gives it such an admirable
ess, as makes it equal to any that is brought

wasted, and renew the kilns with fr
coal in the same manner as before.
not melt the metal, but consumes the
part of the ore, and makes it malleal
instead of the beating and washing
other ores. After this operation it i
the furnaces, which are built of bri
about thirty feet high, and somewhat
the shape of an egg, being about ten
the middle, but much narrower at
bottom. Behind the furnace are fixe
pair of bellows, the noses of which m
hole near the bottom: these are w
large wheel turned about by water,
contrived as to play alternately, th
the blast whilst the other is rising.
is filled with ore and cinder, inter
charcoal, which being set on fire,
run together into a hard cake or lu
metal, as it melts, trickles down into
the bottom of the furnace, where th
tage open for the men to take away t
dross, and let out the metal as they s
Before the mouth of the furnace lies
of sand, wherein they make furro
shape they please; and when the
, the metal is let into them. In
y keep the furnaces constantly e
ny months together; never suffer
o slacken night or day, but still pour

›p a fresh supply of ore and fuel, which in these ›orks is always charcoal. And from hence the ›ws and pigs of iron, are carried to the forges, ›here they are wrought into bars.

About Mendip-hills there is great plenty of oal, which almost every one knows to be a lack, sulphureous, inflammable matter, dug out f the earth, and serving as common fuel. It is › be found indeed in most parts of Europe, but ıe English coal is of greatest repute even in ›reign countries, and makes a considerable arıcle of our commerce. The Mendip coal-mines re very subject to fire-damps *, by which many

* Mr. Jessop, in the Philosophical Transactions, ives an account of four sorts of damps in mines. The rst and most common is that whose approach the workıen are sensible of by the flame of the candles becomıg orbicular, and lessening by degrees, till it goes ıite out; as also by their shortness of breath. Those ho escape swooning, receive no great harm; but those ho faint away, are tormented with violent convulions on their first recovery.—The second is the Peaseloom damp, so called from its smell, which never appens but in summer, and is not found to be mortal. he miners in the Peak suppose it to proceed from the ed trefoil-flowers, which grow thereabouts in great bundance.—The third is the most pestilential and most ange of all; for it is seen hanging to the roof of ose passages that branch out from the main groove, in ound form as big as a foot-ball, and covered with a in like a spider's web. If this be accidentally broken, e damp immediately flies out, and suffocates all who e near it; the workmen, therefore, by the help of a ick and a long rope, contrive to break it at a distance; ter which they purify the place well with fire before ey venture in again. They imagine it to be the steam sing from their bodies and the candles, which, conıpsing in the highest part of the vault, at length con-

men have been killed, maimed, or miserably burnt. Some have been blown up at the mouth

tracts a film, and becomes pestilential.—The fourth, called the Fulminating or Fire-Damp, is a vapor, which being touched by the workmen's candles, presently takes fire, giving a report like a gun, and producing all the effects of lightning. The smoke proceeding from this damp is of the smell and colour of that from gunpowder.

Naturalists have given very surprising accounts of the effects of damps, a few instances of which may perhaps be agreeable to the reader. In the History of the Academy of Sciences, *ann.* 1710, we are informed, that a baker of Chartres, having carried several bushels of ashes into a deep cellar, his son going down afterwards with more, the candle went out on the middle of the stairs; but having lighted it again, he went to the bottom, where he cried out for help, and they heard no more of him. His brother, a strong youth, ran down after him, cried out he was dead, and was heard no more. He was followed by his wife, and she by a maid, and still it was the same. This struck the whole neighbourhood with a panic, and no body durst venture any farther, till a resolute fellow, persuaded the four people were not dead, would go down to their assistance, but he also cried out, and did not return. Upon this, another man got a hook, and, without going to the bottom drew up the maid, who having taken the air, heaved a sigh, and died. Next day a person undertook to get up all the bodies with a hook, being let down by a rope on a wooden horse, to pull up whenever he gave notice. He soon called, but the rope breaking, he fell into the cellar, and was drawn out dead presently after. At length the physicians being consulted, gave their opinion, that the ashes or brands had not been well extinguished, and the cellar abounding with salt-petre, natural heat had raised a malignant vapor, which was the mischief; and that the remedy was to throw in a quantity of water. This being done, and a lighted candle were let down, without any harm to either; a sufficient proof that the danger was

of the works; and the turn-beam, that hangs over he shaft of the pit, has been thrown off its frame by the violence of the blast. To prevent these

Dr. Connor, in writing upon the same subject, observes, that as some people were digging in a cellar at Paris for supposed hidden treasure, the maid went down to call her master, and found them all dead, but in their working postures, and seemingly intent on their several offices.

We shall conclude these remarks with an account of a singular damp in a well in the Isle of Wight, as given by Mr. Cook in the Philosophical Transactions. In 1733 a farmer employed some workmen to sink a well, who about eighteen feet from the surface, dug through a stratum of a mineral mixture, without any inconveniency; nor were they at all incommoded in carrying on the work, till about twelve days afterwards, when they were annoyed with a faint suffocating heat, which as they were drawn up, was most remarkably perceived against the mineral stratum above-mentioned. Next morning a young man letting himself down by a rope, as soon as he came over-against the same stratum, became incapable of sustaining his own weight, fell to the bottom, and died immediately. Another young man, not suspecting the cause, having seated himself across a stick fixed to the rope for that purpose, was let down to his friend's assistance; but when he came to the same depth, he was observed to give the rope a great shock, fell down as the other had done, and soon expired. A third person being tied fast in a large basket, was let down more warily; and when he came to the same stratum, finding himself almost suffocated, he cried out, and was drawn up again immediately; but remained in the air near half an hour, pale, panting, and speechless. In three hours time the dead bodies were drawn up, but brought a very disagreeable stench with them. The well was left open about eight months, but at the expiration of that time, it was filled up, being equally useless and offensive.

t to cleave into thin flakes; and, when kindled,
lds a continual blaze till it is consumed to
es. Its hardness renders it capable of a fine
lish, and standishes, cups, candlesticks, &c.
frequently made of it. Though it is as black
jet, it will not soil the finest handkerchief.
There is another uncommon kind of coal dug
in Staffordshire, called peacock-coal, because,
en turned to the light, it shows all the colours
the peacock's train; but it is too soft to be
ished.

We must not dismiss this part of our history with-
noticing a fossil earth, commonly called ful-
s earth, which seems almost peculiar to Eng-
l, and is of great use in the woollen manufac-
. Large quantities of it are dug up near Brick-
in Staffordshire, Ryegate in Surry, Maid-
e in Kent, Petworth in Sussex, and Wooburn
Bedfordshire. It is a rich kind of earth,
nding in nitre; and is so necessary to the
ing of cloth, that the exportation of it is
ly prohibited.

ne subterraneous productions already men-
d, to which we may add marble, free-stone,
are some of the most useful that our island
ds. But there are great variety of fossils to
und in the bowels of the earth, which though
apparent service to mankind, excite our
ration, and afford matter for curious specu-
s and enquiries. By these we do not mean
ative fossils, which have their several uses,
will be occasionally taken notice of in the
e of this work; but those of an adventitious
which have not been generated in the earth,
leposited there by earthquakes, deluges, or
other extraordinary catastrophe. These

are trees *, plants, shells, bones, teeth, both of sea and land animals, which are fou great abundance in several parts of the Sometimes we find whole beds of shells †, of the same or of different kinds; some fishes petrified; and the branches and leav trees, sea-mosses, &c. either petrified o pressed on stones in their perfect shape proportion. These extraneous fossils have sioned many enquiries among naturalists, find it no easy matter to account for the surp phænomena of petrified sea-fishes in plac

* Some years ago there were found in England, depth of above a hundred feet, several huge oa maining entire with their branches. They ha tracted a blackness equal to that of jet, and remarkable hardness. How these trees should there, unless by a subversion of the whole globe time of the flood, it is difficult to conceive.—Son sons are of opinion, that the trees which have found under ground in Hatfield Chace in Yorkshir in the morasses and fens in several other counties, cut down by the Romans, in order to dislod Britons who used to shelter themselves in the marshy woods, and sally out as opportunity offe intercept their provisions and disturb their garrison

† We have a remarkable instance of this kin Reading in Berkshire, where a continued stra layer of oyster-shells is found at a great depth fr surface of the earth. They lie in a bed of g sand, upon a hard rocky chalk, and are often d entire by the men who work in the chalk pit, an who visit the place out of curiosity. The she brittle, and easily separated from each other; b thing is found within them, except some of the sand above mentioned. What makes this the wonderful is the distance of the place from th which is not less than forty or fifty miles; so tha are generally supposed to have been left there universal deluge.

stant from the sea, and even on the tops ountains; shells in the midst of quarries one; elephants teeth, and bones of anima eculiar to the southern climates, and plants onl owing in the east, found in our northern anc estern parts. The most probable conjecture is, at all fossils of this kind were buried in the rth at the time of the universal deluge.

Dr. Woodward, in his Natural History of the arth, seems to have set this matter in a pretty ear light, though his system may be liable to me objections. He imagines, that the whole ass of earth, with every thing belonging there-, was so completely disunited at the time of he flood, that a new earth was formed in the osom of the water, consisting of different strata r beds of matter ranged over each other, nearly cording to the order of their specific gravities. y this means plants, animals, shells, bones, &c. t yet dissolved among the rest, became blended th the mineral and fossile matters, which either served them entire, or assumed and retained ir figures and impressions. He farther sup-s, that these strata were originally parallel, , and regular, and rendered the surface of arth perfectly spherical; but that towards the f the deluge, they were broken on all sides e globe, and their situation varied, being ted in some places and depressed in others. though most of the fossils resembling shells, , &c. may reasonably be supposed to owe rigin to the universal deluge, there are hich are probably native stones or rock-

The Trochitæ, or Trochites, for in- vulgarly called St. Cuthbert's Beads, be of this kind. They are commonly of

shining when broken,
vinegar. Their figure
metimes a little taper-
covered with fine radii
middle to the circum-
are often joined toge-
at the rays of one enter
r. They are found in
and also in Mendip-
about, and sometimes
is sizes. Mr. Beau-
Trans sactions, assures
mir es are made up
hat they are found
so ne of them yet
or sistence of lime-
e evident begin-
d others become
o the curiosity of

Cornu Ammonis, and the Astroites, bein
ged in vinegar or the juice of lemons, wi
about as if they were alive; for the acid,
insinuating itself into their pores, makes way
e introduction of a warmer air than what
odged therein before; which being immed-
dilated, and struggling to disengage itself,
ons a tremulous motion in those bodies.

ter this article, it may be proper to mention
sity in Ireland, about eight miles from Co-
which has obtained the name of the Giant's
way, though it is evidently the work of
. It consists of many thousand pillars, most
m standing perpendicular to the plane of
rizon, and very close to each other. Most
m have five sides, some six, and others
and yet their contexture is so adapted,
ere is no vacuity between them. They are
fteen to twenty-four inches in diameter, and
nposed of several joints or pieces of different
s, the convex end of one being exactly
o the concavity of another. The sides of
llars, which touch each other, are of a
free-stone colour, but upon breaking off
ieces, the inside appears like dark marble,
lling that which the ancients called basaltes.
useway runs from the bottom of a preci-
nto the northern ocean, how far is not
; but at low water it is visible at least six
d feet in length, the breadth in the widest
eing about two hundred and forty feet, and
narrowest a hundred and twenty. In some
is fifteen or twenty feet, in others six and
above the level of the strand.

the most remarkable. Saffron, which
cultivated near * Walden in Essex, rise
bulbous root, and blossoms in Septem
October. Its leaves are long, narrow, tl
soft to the touch; and its flowers, whic
times appear before the leaves, and s
after them, are of a pale purple streak
whitish lines; but towards the bottom of
the purple is deeper. From the middl
flower arise three flame-coloured sta
chives, crowned with their apices; an
these is the ovary or pistil of the plant,
the seeds are formed. From the upper
the ovary arises the style, a slender tube
within the fistular part of the flower whe
a whitish colour, but changes into yello
it divides into three parts opposite to the
the stamina. These three stylets are the
from of the shops, for the sake of which

for use. They usually plant it three years in
e piece of ground, and then remove it to an-
ıer. The English saffron is reckoned the best
Europe.

Woad *, which is much used in dying blue co-
ırs, is produced from a plant called Glastum,
ıose leaves resemble those of ribwort-plantain.
is much cultivated in Bedfordshire, where they
ler it in the following manner.—The seed is
vn annually in the spring, and the leaves are
)pped for the first time about the middle of
ıy, and perhaps three or four times afterwards,
)ecially in a wet summer, though the best is
)duced in a dry season. The first crop excels
goodness, every succeeding one being gra-
ılly worse. When gathered, the crop is ground
all in a mill, and having laid eight or ten
ys in heaps, it is made into balls, which are
ed on hurdles, and then ground to powder.
is done, it is spread on a floor and watered,
ich is called couching; and then by turning it
ery day it is rendered perfectly dry and mouldy,
l is put up in bags for the dyer's use.

The Hop, a plant of the reptile kind, whose
ver is a principal ingredient in malt-liquors, is
tivated in several parts of England, especially
Kent and Surry. This plant creeps upon the
und, unless it finds pales or shrubs to cling to,
is supported by poles stuck in the ground for
t purpose, which is the method used in the
-gardens. Its stem is long, flexible, rough,

* The ancient Britons used to dye their bodies with a
ture of this plant, to make them appear formid-
to their enemies, or perhaps to defend them against
inclemency of the weather.

and hairy; its leaf indented like t
and covered with a kind of pric
its flowers, which grow in a s
cluster, are of a greenish yellow, r
of the female elm, both as to form
flower contains a blackish bitter
the seed of the hop; but it is usu
by sets, eight or ten inches lon
three or four joints. These are se
a foot square, one at each corner
the middle; and these little pla
are formed into a kind of hillocks,
distance of six or eight feet fro
When the hops are two or thr
ground, they are conducted and t
but not so close as to hinder their
about Midsummer, when they b
such as have not reached the top
should have their heads nipped of
branch the better. They blow t
of July, and the forward ones are
of August. Their ripeness is disc
fragrant scent, and their changing
are over-ripe, they will be apt to
and lose much of their verdure
their value. When dried on a k
up in bags, they will keep for sev

Few of our vegetable produc
are of more universal use than f
which are plants of much the sam
the first is abundantly finer, an
more beautiful manufactures.—
with a slender hollow stem, us
feet high, whose bark consists of
which being dressed and worked
ner, affords us that valuable commo

which we now make to very great perfection; and the Irish in particular have, of late years, improved that manufacture to such a degree, that they export great quantities of it to England, and to the British colonies in America. Flax thrives best in a soil that has long lain fallow, and the seed must be sown thick in a warm season, about the end of March, or the beginning of April. Flax pulled up in the bloom is whiter and stronger than that which stands till the seed is ripe. Instead of steeping it in a standing water, (as they do hemp) it is usually exposed alternately to the dews of night and the heat of the sun, whence it receives a finer colour: after this it is well dried, and undergoes much the same preparations as hemp to fit it for spinning.—Hemp grows much taller than flax, rising into a slender sort of shrub, with a hollow stem, and the leaves a little jagged. Its seed grows on the top of the stem, but is only produced by hemp of the male kind, commonly called Karl, as the female is called Fimble. But the most valuable part is its fibrous bark, which, after undergoing various operations, yields us thread, cloth, cordage, &c. The seed is usually sown in May, and the plant is fit to gather in August, its ripeness being indicated by the stalks turning white, and the leaves yellow. The mode of gathering it is to pull it up by the roots, after which it is tied up in bundles, and laid to steep in a pool, or other stagnant water, to rot the bark; which done, it is taken out again, and well dried. It is then crushed with an instrument called a brake, to bruise the inward substance of the stem; and when it is thus reduced to such a state, as to hang together in small shivers, these are separated from the bark by beating it with a

swingle, a piece of wood edged for that pu
The next operation is to beat the hemp on a
with beetles, till it be sufficiently soft and pl
after which it is drawn through several t
instruments of different fineness, where
shorter tow is separated, and the rest is pr
for spinning, weaving, &c.—Upon the wh
is surprising to consider what numerous
tages mankind may enjoy from the two
plants we have been speaking of, and eve
their bark alone. This affords us a part of
which accommodates us day and night,
not only neat and convenient, but cont
much to the health of our bodies. From he
have those spreading sails, by the help of
our ships are wafted to the remotest parts
globe; and from the same bark the ro
which they are managed, and the strong
for their anchors, so necessary to their se
In a word, the materials formed from the
these plants are of constant and general u
domestic affairs, husbandry, commerce, ar
manufactures.

Some persons might think us guilty of
pardonable omission, if we did not menti
famous hawthorn at Glastonbury, in So
shire, which was formerly regarded with
stitious reverence, as being said to pu
blossoms every Christmas-day, and to hav
taken root there from a staff which Jos
Arimathea fixed in the ground. That th
thorn near Glastonbury, which in ver
pters used to blossom about that time o
undoubtedly true; but the report of its
g always exactly on Christmas-day is e
groundless: The tree was cut down som

in the seventeenth century, but several branches of it were planted in the neighbourhood, which grew and blossomed like the old one, and may still be seen in the gardens of the curious.

ANIMALS.

AS the animals peculiar to any country are generally known to its inhabitants, it is natural to suppose that there are but very few in the British isles which can afford much entertainment to an English reader. Among the family of birds, however, there are some remarkable for singularities, which cannot fail to excite the attention of the curious.

It is said, that in the vicinity of Royston, a market-town of Hertfordshire, there are crows which have some white feathers about their breasts and wings, and in this particular differ from all other crows in our country.

In a particular family near Highworth in Wiltshire, is preserved an uncommon breed of geese, which grow to so extraordinary a size that some of them are said to weigh from twenty to thirty pounds. These are usually bespoke by gentlemen who have the curiosity to grace their table with such a noble dish; but the owners take so much care to preserve the breed to themselves that they will scarcely part with an egg upon any consideration.

The Bass Island, situated in the frith of Forth Edinburgh, is annually visited by incredible of Solan geese. They generally arrive in

one or two bodies, and the pri
always preceded by some few of
which seem detached for the purpo
out their new habitations. Aft
arrive upon the island, the inhabi
to give them no disturbance till
their nests, after which they can
frightened away. They lay but o
they affix most dexterously to a po
in the middle of their nests, an
holding it under one foot. They
fat, but their flesh has a strong flav
rings, which form their principa
have a long neck like a crane, and
bill, about four inches in length, w
strike so violently at their prey, th
sticks fast in a board baited for that
herring. Considerable profit is
feathers, and the flesh of their
esteemed delicious. These fowl
Island about the end of Septemb
they retire for the winter cannot be

Several of the western isles of S
frequented by vast numbers of So
ticularly St. Kilda, Soa, and Bore
bitants of these little islands (the t
are not above a mile in circumfer
take about twenty thousand of the
they keep in storehouses built for
These wild geese will fly above t
fish for herring, and return to thei
ix entire in their gorges which
their young. Their fat is a
rary, and the St. Kildians ea
en appetite, even after the
ey smell most offensively.

r floating on the waters, to the place where
lds; grass, sea-weeds, shavings of timber,
of cloth, &c.; yet such is the difficulty in
ing a sufficient quantity of these different
ls for building, that they often encroach on
neighbour's property; and the manner in
they do it, shows that want has given them
of property unknown among fowls which
plenty: thus if a Solan goose finds her
our's nest at any time vacant, she takes ad-
e of the circumstance, steals as much of the
ls as she can conveniently carry, and, sen-
f the injustice she has done, flies directly
s the ocean; when, if the lawful owner
ot discover the injury before the thief is out
t, she escapes with impunity, and soon
with her burden, as if she had made a
purchase.

is been said, that one of the body acts the
f a centinel, while the other geese are
, and gives the alarm if an enemy should
ch; and that a general massacre might be
made, if this centinel were surprised and
hed. But the St. Kildians deny, that the
of the whole flock depends so entirely on
gilance of the watch. The Solan geese
to St. Kilda in the month of March, and
ue there till after the beginning of No-
r, when they migrate to some other favorite
s.

Tulmer, another sea fowl which frequents
slands, is nearly of the same size as a barn-
owl; but his legs and wings are much

nt, and the egg, which is larger than
uck, is most beautifully variegated with
of colours, as black, white, red, yel-
and green; and scarcely any two of
nble each other. This fowl builds no
st, but lays her egg on the ledge of a
where she plants it in so very nice a
hat if once touched, it will be found
to fix it in the same place again; and
is the hold their eggs have of the rock,
fowls are surprised, so as to start from
hurry, they tumble into the sea, in thick

vies are no sooner discovered on the
n those who had formerly distinguished
s by such feats, descend with the help of
o the well known shelves of the rocks,
ng a broad piece of linen, or any thing
y white, fixed on his breast. This is
e night-time, when the bird mistaking
so conspicuous, for a part of the rock,
s to cling to it, upon which he is in-
ght and dispatched. In this situation
r continues till about the dawn, and
s the wonted signal, by pulling the rope
his life is suspended: his companion,
above, takes care in the first place to
prey, which sometimes consists of no
ur hundred Lavies, and when that is
up the adventurer, who is highly ex-
his prowess, and most graciously re-
ll his friends.

Before we dismiss this subject it will be pro
to give a farther account of the manner of cat
ing fowl in general, which is an affair of the
most importance. The men of St. Kilda,
upon these occasions divided into fowling part
each of which generally consists of four pers
distinguished by their skill and agility. E
party has at least one rope about a hundred
eighty feet in length, made of raw cow-hi
salted and cut circularly into three thongs, al
equal length, closely twisted together; by
means they are capable of sustaining a gr
weight, and are so durable as to last about
generations. By the help of these ropes, t
traverse and examine rocks of a prodigious hei
linked together in couples, each having an en
the cord fastened round his waist. When on
the two descends, his colleague plants himself
a strong shelf, and takes care to have such
footing, that if his companion makes a false
and falls, he may be able to save him. "Th
says the Reverend Mr. Macauly, are stupend
adventures, equal to any thing in the feats of
valry. I was present at an operation of this ki
my curiosity led me to see so uncommon a tri
skill; but before it was half over, I was gre
shocked. Two noted heroes being drawn
from among the ablest men of the commu
one of them fixed himself on a craggy shelf:
companion went down a hundred and tw
feet below him, and after having darted a
from the face of a most alarming precipice, h
over the ocean, he began to play his gam
ing and laughing very heartily. The c
ared greatly delighted, but for my pa
all the while in such distress of mind, t

not run over half the scene with my eyes. fowler, after having performed several anricks, and given us all the entertainment his ould afford, returned in triumph, and full of wn merit, with a large string of fowls round eck, and a number of eggs in his bosom."

some of the Isles of Orkney are found the -Geese or Barnacles, which are covered a shell, and adhere to trees by the bill, from ce they are said to derive their nourishment. Martin says he saw many of them, but never ived any upon the tree with life in them; h the natives informed him they had observem move with the heat of the sun. Sir Roloray observes, that they hang at the tree by a longer than the shell, of a kind of filmy ance, somewhat resembling the wind-pipe chicken. In every shell he opened he found fect sea-fowl, with a little bill like that of a , feet like those of water-fowl, and the feaall plainly formed; but he never saw any of alive. Thus strange stories have been told, oo readily believed, concerning the bar-; as that they grow upon trees by the sea-shells, out of which the birds, when come roper degree of maturity, make their pasinto the water. Some persons have supposed to be produced from rotten wood that has d long in the sea, or from certain fruits into the water; and others have ascribed origin to a kind of sea-shells, adhering to lanks and bottoms of ships, which from e are called Conchæ Anataferæ; but these in reality contain an animal of their own es, as well as the oyster, muscle, or other fish. The truth seems to be, that the bar-

nacle is not a marine animal or fish, (a
have imagined) but a real goose, and ov
like other fowls.

Before the south promontory of the Isle
lies a smaller island called the Calf of M
sorted to at a particular time of the year by
number of sea-fowl called Puffins, that bree
in the holes of rabbits, which abandon the
tations to these visitors during that season.
the middle of August, when the young o
ready to take wing, the natives have a me
catching them in such quantities that betwe
and five thousand are taken every year,
which are consumed by the inhabitants
selves, and the rest are pickled in an
manner, and sent abroad as presents.

As we are speaking of wild fowl, it
proper to take notice of the vast numbers
aquatic kind, particularly ducks, mallard
and widgeons, which are taken in the
Lincolnshire, and the adjacent counties
manner of taking them in decoys, into wh
are enticed by ducks bred up tame for t
pose, is extremely curious, and very prof
the inhabitants. The decoy-ducks, be
constantly at certain places, become at l
familiar with their feeder, as to take the
out of his hand; and as they are not c
they fly abroad and return again at pleas
the proper season of the year these subt
ones take frequent flights, and sometim
being absent several weeks, return home
numerous company, which have
d from Holland and other part
As soon as the decoy-men
settled, and that their num

increasing, they go secretly to the side of the pond, under the cover of hedges made with reeds, and then throw over handfuls of corn into such shallow places as the decoy-ducks are acquainted with, to which they resort and entice the strangers. Thus they are entertained without any disturbance for several days, the bait being sometimes thrown in one place, sometimes in another, till at length they are led insensibly into a narrower part of the pond, where the trees on each side hang over-head like an arbour, though at a good height from the water. Here the boughs are so artfully managed, that a large net is spread near the tops of the trees, and fastened to hoops which reach from side to side; but the passage is still so wide and lofty, that the fowls do not perceive the net above them. The decoy-man, keeping unseen behind the reeds, goes forward, throwing corn into the water, which the decoy-ducks greedily devour, and encourage their foreign guests to follow them, till by degrees they are all got under the arch or sweep of the net, which imperceptibly grows lower and narrower, till it ends in a point like a purse, about two or three hundred yards from the first entrance. When they are all sufficiently within the net, a dog, which is perfectly taught his business, rushes from behind the reeds into the water, swimming directly after the ducks, and barking as he swims. The frighted ducks immediately take wing, but being beat down again by the net, they necessarily swim forward to avoid the dog, till at length they are hurried into the purse, where they fall a prey to the decoy-man, who waits to receive them.—By this means incredible numbers of wild fowl are taken every week during the season

[redacted]

[illegible] AND IRELAND.

[illegible] sent up to London; a[illegible]
[illegible] that many of the d[illegible]
[illegible] at [illegible] per annum.

ANTIQUITIES.

[illegible] remain of Roman antiq[illegible]
[illegible] which runs the [illegible]
[illegible] the counties of [illegible]
[illegible] and extends [illegible]
[illegible] on the we[illegible]
[illegible] of the Ty[illegible]
[illegible] it as a [illegible]
[illegible] North B[illegible]
[illegible] later a[illegible]
[illegible] wall."
[illegible] w[illegible]
[illegible] stakes [illegible]
[illegible] together with w[illegible]
[illegible] by Severus, in the year [illegible]
[illegible] stone fortresses or turrets were [illegible]
[illegible] alarm might be given [illegible]
[illegible] by the sound of a trumpet. The [illegible]
general Ætius rebuilt it with stone about [illegible]
[illegible] but it was soon ruined by the Picts, [illegible]

moved to build houses, or to make enclosures about the neighbouring grounds. About ten miles east of Carlisle, it runs up a high hill, and from thence to its crossing the river Irthing, it runs through a large waste, where it remains entire, to the height of about five or six feet. From Thirlewall castle, not far eastward of the Irthing, the wall is continued over a range of steep and rugged rocks, that extends about nine miles. The highest part of it now standing between Carlisle and Newcastle is about half a mile from Thirlewall Bankhead, where it is nine feet high; and at this place are some vestiges of a Roman city surrounded by a deep trench. At Seavenshale, on the north side of the wall, are still to be seen the ruins of a Roman castle, curiously vaulted underneath; at Carrow-brough, about a mile and a half distant, are several traces of another ancient city; and at Postgate is a square Roman tower, now converted to a dwelling-house.

Before the wall on the north is a deep broad ditch except between Thirlewall Bankhead, and Seavenshale, where it is sufficiently secured by the steepness of the rocks on which it is built. The ditch is in most places thirty-six feet broad and five feet deep; and a military stone causeway seems to have run at twenty or thirty yards distance on the south side, which, between Postgate and Carrow, is but little decayed.

In the Pict's wall have been found, upon various occasions, pieces of tubes or pipes, which are supposed to have been artfully laid in the wall between each turret, for giving notice of the approach of an enemy; so that any important intelligence could be communicated from sea to sea in the space of an hour. Here, also, have been

found many coins, altars, and statues; and a
the rest a brazen image about six inches
supposed to have been the statue of the god
minus, which the Romans used to lay in the
dation of their boundaries.

The principal military ways in our island are
called Watling-street, Stone-street, Ikenild-
and the Fosse-way, which are visible in many
of South Britain, where most of the Roman
and stations stood, and where most of th
mains of Roman antiquity have been
vered.

Watling-street crosses the river Thames
Leicestershire, Northamptonshire, and War
shire, into Staffordshire; and running wes
passes into Shropshire near Brewood. Fro
village of Boringalé, in Shropshire, it
through Wellington, and Wroxeter, where
very entire; and may be seen to the exte
ten or twelve miles both northward and
ward: it crosses the Severn at a place
Wroxeter-ford, and is perfectly visible be
Cardiganshire in South Wales, and in La
shire in Scotland. It may also be seen near
in Kent, and at Edgeware in Middlesex.

Stone-street passes through the church-y
Darking in Surry, and may be plainly trac
ore than two miles south of Okeley. I
is chiefly of flint-stones and pebbles, a
early thirty feet broad and five feet deep.
Surry it passes through Sussex to Arn
nd it is also visible in Kent, from Hith to th
of Canterbury.

Ikenild-street extends from the mouth o
Tyne, at the eastern extremity of the Pict's
to the city of St. David's in Pembrokeshir

Oxfordshire at a village called Chinner, ming south-west, passes the river Thames rkshire between Reading and Wallingford, o visible in several parts of Staffordshire arwickshire.

Fosse-way, may be traced through great Nottinghamshire, Lincolnshire, and Wilt- and in some places exhibits very consider- mains of Roman antiquity. It enters Wilt- t Kemble, north-east of Malmsbury, and g south-west, passes into Somersetshire at re-stones, north-east of the city of Bath.

Westmoreland the traces of two military re still visible, and upon one of them have liscovered several relicks of remote anti-

It runs in a south-easterly direction from e to Penrith, where it passes the river into Westmoreland, and, crossing that in a similar direction, enters Yorkshire at ross. The other Roman way runs from Vorran, near the Pict's wall, to Kirkby , on the bank of the river Eden; and at the f South Tyne it appears to be about ten road.

hester, which is now only a hamlet, con- of one farm-house and a church, is seated e open country, in the county of Hamp- ten miles from Reading, but was once a nd populous city, the celebrated Vindomia domium of the Romans, as appears from the s still remaining. The walls are in many almost entire, and in some nearly twenty gh, having various kinds of trees, of such rable bulk growing out of them, that twenty years past, they are said to have near a thousand pounds worth of timber.

is a village called the Soak; and about half a mile further is a bank and ditch, which extend several miles; but as they do not seem to environ the city, they were probably no part of the works of security, but are of a more modern date.

This city was well situated for health, but not for the conveniencies of life; for there is no river within many miles of it, and only a little rivulet, which rises in Kingslere hills, and running within a mile of the walls, discharges itself into the Kennett, at Reading. There are, however, many springs without the walls, and perhaps there might be wells enough within, to afford water sufficient to enable the inhabitants to sustain a siege.

The streets appear to have been regular, and to have intersected each other at equal distances; the one part running from east to west, and the other extending from north to south, as may be evidently seen by the corn growing in the fields, especially if viewed before harvest; where an attentive spectator may trace not only the streets, but the foundations of many houses, some of which seem to have been very large, the contents of many of the rooms being thirty-three feet by twenty-eight. The city appears to have been destroyed by fire, as great quantities of ashes and charcoal are now dug up, without any timber; and many pieces of the coin, which have been found of late years, are so burnt, as to be deprived of the phlogiston principle, and capable of being reduced to powder.

In or near the middle of the city, are some remains of a temple, which appears to have been dedicated to Hercules, from an inscription on a piece of grey marble dug out of the foundation

by Mr. Stair of Aldermaston in Buckingham-shire.

Camden informs us, that this city was rebuil by Constantius, but he has not been able to ascer tain by whom it was first erected. It was, how ever, probably built by the ancient Britons, fo they very early learned the method of buildin forts from the Phœnicians; and Mr. Stair, i digging under the old buildings, and taking u the Roman pavements, discovered other founda tions of an elder date, and of a different work manship, composed of rough flint stones, and gravelly mortar. What confirms this conjectur of these being the works of the ancient Briton is, that British coins have been found there, amon which is one of gold, and another of silver, ver perfect, and extremely well preserved.

The materials dug up from the ruins are Ro man pavements, Roman tiles, pieces of coars marble, parts of round free-stone pillars, squar free-stones fluted at the edges, some of them ver large; mutilated statues; pieces of copper vesse ornamented; the bones of various animals; an without the walls to the eastward, a human ske leton which measured full nine feet in length.

The coins, which have been found here great abundance, are of gold, silver, copper, an Corinthian brass; some are cased with silve and others only gilt. Among these coins, a hat are ancient British, and the rest a Some of the latter are consular, and t f most of the emperors and empresse gustus down to Maximus, in or ne reign the city was probably destroyed; h gh a great number of coins are found of a most all the emperors and empresses, exce

o, yet not one has been found of any Roman
arch since Maximus, nor any Saxon or Da-
coins at all, which there probably would have
ı had the city subsisted after his time. It
t be observed, that Mr. Stair had in his posses-
above two thousand coins, in gold, silver, cop-
and brass, on most of which the inscriptions
e entire, though the reverses were mostly dif-
nt. Two onyx-stones were found in this
:e, on one of which was depicted a cock pick-
out of a cornucopia, or horn of plenty; and the
:r was marked with the letters Z A C P: they
e each of the size of common seals, and of an
l form.

mong the antiquities of England, however,
e deserve a particular description more than
once beautiful city of Old Sarum, which stands
ıe distance of one mile from Salisbury, and
formerly the see of a bishop. This city was
ectly round, and, when in its prosperity, toge-
with its lofty castle, rising from the centre,
t doubtless have exhibited a very magnificent
earance; the whole being built on a large hill,
commands a beautiful and extensive pro-
:t, which, with immense labour, was reduced
ı uniform circular figure. The city was nearly
thousand feet in diameter, encompassed by a
h of great depth, and two ramparts. On the
:r rampart stood a wall, near twelve feet broad
s base, formed of flint and chalk, strongly ce-
ıted together, and cased with hewn stone-
k, on which was a parapet with battlements
e round. Of this wall there are still large re-
ns to be seen on the north-west side.

t a considerable distance, on the summit of the
which was in the centre of the whole ex-

cumference, stood the castle or citadel, surr
with a deep intrenchment, and a high r
The city was divided into equal parts, no
south; and near the middle of each divisio
the gates, which formed the two grand en
and were directly opposite to each other.
of these gates had a tower over it, and t
was a mole of great strength. Besides
there were ten other towers, which exte
equal distances quite round the city; and o
to them, in a straight line with the castl
built the principal streets, intersected in the
by a grand circular one, that went quite ro

The area on which the city stood, t
rounded with walls, ramparts, towers, and
intrenchment, was also, for its greater s
divided into nearly equal parts by other i
ments and ramparts; by which means, if
was taken, the other was still defensible
the whole of the outworks were in the h
an enemy, the besieged might retire i
castle, whose walls, from the large fragme
foundations that are left, appear to have b
pregnable. There seems to have been
grand entrance into the castle, which wa
east, through a narrow gate of immense s
from whence a double winding stair-case le
top. There appears to have been five w
signed to supply the garrison and the inh
in time of war, or in case of a siege; b
have been long filled up.

Whether Julius Cæsar pushed his conq
far, is controverted; but that Old Sarum
quented by the Romans is most certain,
ons of Constans, Magnentius, Constanti
us, often found there. Kenrick the

conquering the Britons in the year 553, took ession of this place; and it was held by the st-Saxon kings, his descendants, till Egbert ght the whole heptarchy under his power. g Edgar, who was descended from him, called eat council or parliament here in 960; but in year 1003, it was taken by king Swen, who ng pillaged and burnt part of it, returned to ships loaded with wealth. The ruin of this e may be dated from a quarrel which arose veen the garrison and the clergy in the reign of ; Stephen. The ecclesiastics disdaining to sub- to military control, concerted a removal of their edral to Salisbury: this plan was carried into cution under the reign of Henry III. and in the of Henry VII. Old Sarum was totally de- ed.

Of the strength and splendor of this ancient ress few vestiges now remain, and the town is uced to one solitary farm-house; which, how- r, still retains the enviable privilege of return- two members to parliament.

York was the capital city of the Brigantes, on ch account Ptolemy called it Brigantium; but as more generally known among the Romans he name of Eboracum. From an inscription he reverse of Severus's coins, it appears that was a Roman colony, in which the sixth le- n, called Victrix, was in garrison. The em- ors Severus and Constantius Chlorus died at place; and it is said, that in a vault belonging small chapel, in which Constantius was sup- ed to have been buried, a lamp was found ning about the time of the dissolution of monas- ies.

Near Botham-bar, in this city, was the cemetery

of the Romans; and here several remains of an quity have been discovered, among which were Roman shuttle, supposed to have been used weaving the abestinum, or incombustible line an urn, on one side of which was a woman's he as large as life; several vessels containing bu bones and ashes; and a lead coffin seven feet lo which contained the entire skeleton of a hum body.

Aldborough, in the West Riding of Yorkshi was a large city in the time of the Romans, an place of very great strength; for it appears t the walls were twelve feet thick, and built upo foundation of large pebble stones. Here ha been found fragments of aqueducts, pavements mosaic work, urns, and other vessels of red ca wrought with a variety of figures, great qu tities of ancient coins, and several signets cu ously engraved with figures of men, quadrupe birds, &c. On the south side of this place th appears to have been a Roman camp, contain about two acres of ground.

Lancaster was the ancient Longovicum m tioned by Antoninus, where the Roman lieuten of Britain kept a company in garrison, called t Longovici. A great variety of coins have be dug up at this place, together with several ut tils that were probably used in sacrifice. Ma Roman antiquities have been also discovered ter, Burnley, and Manchester, in unty.

summit of a hill near Lincoln are so of a rampart and ditch, supposed to mains of the ancient Lindum, which yed by the Saxons,; and in the city of L is a gate which is a Roman work still ent

and reckoned the noblest remain of the kind i our island. It consists of a vast semicircle of stone wedged in together without cement; and close t the gate there is another curious piece of Ro man workmanship called the Mint-wall, whic consists of alternate layers of brick and stone, an is sixteen feet high and forty feet long.

The town of Leicester is supposed to be th Ratæ of Antoninus, and the Ragæ of Ptolemy Here was discovered, in the seventeenth century a piece of Roman antiquity, supposed to be th fable of Actæon and Diana, curiously wrought i small coloured stones. Here also are some ruin of a temple, supposed to have been dedicated t Janus; and at a small distance are some remain of a Roman bath, built of small stones, and per forated by several earthen pipes, through whic the water is supposed to have been conveyed.

At Caer Caradock, a hill near the conflux o the rivers Clum and Temd in Shropshire, ar some vestiges of a fortification erected by th British prince Caractacus about the year 53, an gallantly defended against a Roman army unde Ostorius. It is generally known by the name o the Gair, and is situated on the east side of th hill, which is accessible only on the west: th ramparts are walled, but now almost covere with earth, and though the hill consists of a har rock, the trenches of the Roman camp are ver deep. This fortress, however, was taken by O torius, and the brave Caractacus was sent prisone to Rome.

Caerleon in Monmouthshire was the Isca Silu rum mentioned by Antoninus; and many vestige of its ancient splendor were extant in the time o Geoffrey of Monmouth; such as high tower

ruins of temples, theatres, hot baths, aqueducts, vaults, &c. Here were found, about the year 1602, a curious tesselated pavement; a statue in a Roman habit, which appears to have been that of Diana; and a votive altar with an inscription.

Dover castle is said to have been begun by Julius Cæsar, and finished by the emperor Claudius. The area of the fortification occupies thirty acres of ground; and the walls are still standing, though most of the works have been destroyed. Here are the remains of a royal palace and chapel, with stables and other offices, the ruins of which show the building to have been originally very magnificent. In a circular part of the fortification is an old church, said to have been built by Lucius, the first Christian king in Britain, with such fragments of the Roman structures as had fallen into ruins. The castle is supplied with water by a well of a cylindrical figure, which is three hundred and sixty feet deep, is lined to the bottom with free-stone, and is supposed to have been formed under the immediate inspection of Julius Cæsar;—the water is raised by means of a wheel.

Verulam in Hertfordshire was anciently a large and populous city, whence the British prince Cassibelanus was expelled by the Romans; but the inhabitants living quietly under their new masters, were rewarded with the privileges of Roman citizens, and Verulam was erected into a municipium. It was taken and sacked by the Britons under the conduct of the famous Boadicea queen of the Iceni; but it was afterwards rebuilt and restored to its pristine splendor. Here are still remaining some remains of walls and tesselated pavements; and in the year 1666 a copper

coin was dug up, on which a wolf was re presented in the act of suckling Romulus an Remus.

London is generally supposed to have bee founded in the reign of the emperor Claudius; an in that of Nero it was famous for its wealth an the great number of its merchants. About th year 61 it was abandoned by Seutonius Paulinu to the fury of queen Boadicea, who burnt it t the ground and put a prodigious number of th inhabitants to the sword. From this catastroph however, London soon recovered, and the ne city received the name of *Augusta* from its peculia grandeur.

By whom London was walled cannot now b determined. Many persons, however, ascrib the work to Constantine the Great, as many coin of his mother Helena have been discovered amon the foundations. The circumference of the wall were three miles, one hundred and sixty-fiv feet; they were composed of layers of Roma brick and rag stones alternately, and were guard ed at proper distances, on the land side, witl fifteen lofty towers, besides the barbican o watch tower, which stood a little without th walls on the north-west of * Cripplegate. Lon don-wall, near Moorfields, is now the most entir vestige of this ancient precinct.

In many parts of ancient London, Roman an tiquities have been discovered, whenever it ha been thought necessary to dig to a considerabl depth.—In clearing the foundations of St. Paul'

* The walls of London had originally but four gates viz. Newgate, Cripplegate, Aldgate, and Dowgate which were erected over the great military ways.

cathedral, after the great fire of London, was found a spacious cemetery; where lay the Saxons in graves lined with chalk or in coffins of hollowed stones; and beneath them were the graves of the ancient Britons, as appeared by a great number of ivory and boxen pins, which are supposed to have fastened the shrouds in which the bodies were wrapped. In the same row, but deeper, were found many Roman urns, dishes, lacrymatories, and other vessels, some of which were inscribed with the names of deities and heroes, and others were ornamented with figures, in bas-relief, of animals, flowers, &c. Here, also, were discovered tessulæ of pophyry or marble, glass beads and rings, bones, tusks, and several Roman coins.

Beneath the old church of St. Mary le Bow, in Cheapside, were found the walls, windows, and pavement of a Roman temple, and at a small distance was discovered a Roman causeway of rough stone, four feet thick, close, and firmly cemented.

One of the most remarkable pieces of antiquity in London is a large stone, now enclosed in a stone case, on the north side of Cannon-street, and called London-stone. It was formerly fixed in the ground on the opposite side of the street, and secured with iron bars. This stone has been carefully preserved from age to age, and is mentioned by the name of London-stone so early as the time of Ethelstan, king of the West Saxons. The original cause of its erection has never been known; but it is highly probable, that as [illegible] a Roman city this stone might serve [illegible]rd from which the number of miles

: computed to other cities and stations in the ince.

f those remains of antiquity, found in Great ain, which are not generally ascribed to the ans, the most curious is a pile of large stones alisbury Plain, about six miles from the city alisbury, called Stonehenge; the origin, ture and use of which have occasioned many ites among the learned.

he name Stonehenge, which is purely Saxon, signifies nothing more than *hanging-stones*, ably alludes to the disposition of several parts is wonderful fabric: but some authors have osed the true name to be Stonehengist, and ce imagined this structure to have been ed in memory of Hengist the famous Saxon ral; others have asserted that it is the tomb mbrosius Aurelianus, king of the Britons; others have declared that it was raised by rosius in memory of those Britons who were near this place by Hengist the Saxon. Some nious arguments have also been used to prove emple of the Tuscan order built by the Ro-; but most antiquaries have now agreed in opinion of Dr. Stukely, that it was a temple e British Druids *. We shall therefore bor-

The Druids were the priests or ministers of religion g the ancient Britons, Gauls, and Germans; and chosen out of the best families, the honors of their together with those of their function, procured the highest veneration. Nor had they only the nistration of sacred things, but were the judges arbiters of all affairs indifferently, both public rivate, and being in the greatest esteem, the Bri-nd Gaulish youth flocked to them for instruction. children of the nobility retired with them into caves crests, where they sometimes lived twenty years

ow a short account of it from the doctor's le
dissertation on this subject.

Stonehenge is situated on a rising ground
makes a grand and awful appearance, espe
as we approach it on the north-east, whic
remains most perfect. It is encompassed
circular ditch or trench, which having passe
about thirty-five yards before we come
work itself. The whole consists of four
or rather two circles and two oval
innermost being about a hundred and eight
diameter. Of the outer circle, which orig
consisted of sixty stones, that is, thirty up
and thirty imposts, there are seventeen up
yet standing, six of which have imposts
three and two more are still to be seen
even the ground, and also six more up
These stones are of a vast bulk, the upright
fifteen feet high, exclusive of the im
The inner circle, which is about eigh
from the first, consisted of forty
which never had any imposts. Th
parallelograms, like those of the outer c
and nineteen of them are yet standing.
are about twenty inches thick, and four feet
being just half as big as the uprights of the

h is a hundred yards in circumference, must been very delightful when this wonderful ture was entire.

ithin these circles are the two ovals, h are the principal part of the work, here ; the adytum, or cell, into which we may ose none but the higher order of druids to enter. This is composed of what the or calls trilithons, each of which consists of upright stones, supporting another laid across heads and joined by mortises. Of these there five remaining, three of which are entire, wo ruined in some measure, but the stones till upon the spot. From the entrance into adytum, these trilithons are placed two and on each side, and one at the upper end, h was the highest, as the two first on the and left were the lowest; but all the stones f a surprising magnitude. The first trilithon e right has suffered much, its impost and one e uprights being tumbled down, and each en into three pieces. The opposite trilithon e left hand is standing, but very much de- l; the next to it is entire, as is likewise that ; it on the right, except that one end of the st is fallen off, and its upper part is much red by the weather. The trilithon at the end, which stood beyond the altar, was the part of the whole work, the uprights having above ten yards long, well chisselled, and proportioned in their dimensions. One of stands entire, but leans against one of the s of the inner oval; the other is broken er, and lies upon the altar, as does also the impost it once supported. This broken weighs above forty tons, and would require

a hand in this very fabrick, the stones being wrought with a tool, whereas all the other works of the Druids consisted of rude stones, after the patriarchal and Jewish mode. At that time the Phœnician trade was at its height, whose vessels might convey the Egyptians to this island; which makes our author's conjecture the more probable. What might possibly have cleared up these uncertainties, was a tablet of tin, with an inscription upon it, found at Stonehenge in the reign of king Henry VIII. But as the characters were not understood by the persons consulted on that occasion, the plate was either destroyed or lost.

At Abury, on Marlborough Downs, are a few large stones, which some persons have supposed to be the ruins of a Druidical temple, more ancient than Stonehenge, and of greater dimensions. From Abury to West Kennet, there is a sort of walk, about a mile long, which was once enclosed on both sides, and on one side the enclosure is, even now, almost entire. On the brow of a hill, near this walk, is a round trench, enclosing two circles of huge stones, and at the distance of about two hundred and forty feet, great quantities of human bones have been dug up, which are conjectured to be those of the Danes and Saxons, who were slaughtered at the battle of Kennet, in the year 1006. In a field near Kennet, are three very large stones, called the Devil's Coits, which stand erect, and are supposed to have been British deities: and on Marlborough Downs is a barrow surrounded with stones about seven feet high, which is supposed to be the sepulchre of some British general.

[illegible] three miles from Woodstock in Oxfordshire is a monument of antiquity, called

ich-Stones, something of the nature of
henge, it being a circle of stones of an
ular figure, but not above five feet high.
persons imagine them to be the remains of
d British temple; but others suppose they
raised in memory of a victory obtained by
the Dane, or on occasion of his being pro-
ied king of England by his army.
nongst the antiquities of this kind we must
ierate the Hurlers, a number of large stones
iree circles on a down near Bodmin in Corn-
. They are oblong, rough, and unhewn;
take their name from a superstitious opinion
ie vulgar, that they were men transformed
stones for profaning the sabbath, by hurling
all, an exercise for which the people of that
ty are particularly famous. Some take them
ophies erected in memory of a battle; others
oundaries to distinguish lands; and others,
more probability, for sepulchral monuments.
Stukely however supposes them to have been a
le of the Druids, as well as Stonehenge on
bury Plain.
hese circles of stones are frequent in Wales,
re we likewise find many monuments of a dif-
it kind, which may be reckoned among those
uities that are beyond the reach of history.
specimen of the rest, we shall mention that
d Arthur's Stone, upon Kevn-bryn, a moun-
in Glamorganshire. This is a vast unwrought
e, weighing about twenty tons, supported by
r seven others not more than four feet high,
ound in a circle. They are all of the mill-
e kind, which is the natural stone of the moun-
; and it is said, that several tons have been
en off the great one for that use. The carriage

thick. It is completely hollowed within, an entrance on one side about two feet with a stone of the same dimensions lying which probably was intended for a door. at the south end of it, is the form of a be pillow, large enough for two persons, nea out of the stone. At the north end is anoth or couch, and in the middle is a fire-place, hole above it for a chimney. The mark workman's tool are very evident, and it is rally supposed to have been a hermitage.

Ireland, though not so full of antiqui Great Britain, is not destitute of such curi About a mile from Castle-Conner, in the of Roscommon, there is a round hill, into an entrance was discovered in 1640, and square chambers found within it, built wit stones, and communicating with each ot

anes before their conversion to christianity.
ns, altars, trumpets, &c. have been disco-
in the county of Tyrone, in the province of
, of which an account is given in the philo-
al transactions.

BUILDINGS.

Paul's cathedral in London is the most mag-
nt protestant church in the world, and one
finest structures that any age has produced.
id to have been originally founded by Ethel-
Saxon prince, on the site of a temple which
omans had formerly dedicated to Diana. It
ed several successive injuries from fire and
ing, and in the conflagration of 1666 it was
destroyed.
e first stone of the present structure was laid
Christopher Wren, on the twenty-first of
1675, and the design was completed in
; but the decorations were not finished till
ar 1723.
is cathedral is built of fine Portland stone,
he model of St. Peter's at Rome; having
ages of pilasters on the outside, one above
r, the lower range of the Corinthian order,
e upper of the Composite. The spaces be-
the arches of the windows and the archi-
of the pilasters are filled up with various de-
ns.
west front is beautified with a most magni-
portico, supported by twelve massy co-

gan carved underneath it. The north portu
responds with that on the south, and its pe
is embellished with the royal arms and ot
naments.

In the centre of the building rises a stup
dome or cupola; and about twenty feet ab
roof of the church is a circular range of co
terminated by an entablature which supp
handsome gallery, adorned with a stone
trade. On the summit of the dome is an
balcony, from which rises a beautiful
adorned with Corinthian columns, and the
are terminated by a gilded ball and cross.

On the inside the cupola is supported b
stupendous pillars curiously adorned: the
the choir is supported by six pillars, and t
the church by two ranges, consisting of
fore. Round the inside of the cupola

breadth, including the north and south porticos three hundred and eleven; and its height, from the ground to the top of the cross is three hundred and forty-four feet. This pile of building occupies an area of six acres, and is railed round with an iron ballustrade, which is said to have weighed nearly three hundred tons, and to have cost upwards of 11,000l. The whole expence of building the cathedral amounted to 736,752l. 2s. 3d.

At the west end of the church, and within the rails, is a marble statue of queen Anne, holding a sceptre in one hand, and a globe in the other, surrounded with four emblematical figures, representing Great Britain, France, Ireland, and America.

One of the noblest specimens of Gothic architecture in England is the abbey of St. Peter at Westminster, so called from having been the church of a convent dedicated to St. Peter, which was destroyed by the Danes about the year 850. It was rebuilt by king Edgar, and enlarged by Edward the Confessor; but the present magnificent edifice was erected during the reign of Henry III. On the dissolution in 1539, this great monastery underwent the common fate of the religious houses; and the abbot, William Benson, having subscribed to the king's supremacy, was rewarded with the office of first dean to the new foundation, consisting of a dean and twelve prebendaries. In 1560 it was changed into a collegiate church, consisting of a dean and twelve secular canons, and other members, two school-masters, forty king's scholars, twelve almsmen, and several officers and servants.

The form of this church is that of a long cross: its length is four hundred and eighty-nine feet;

Gothic stile. The interior of the church i
rably executed, and the prospective is ver
particularly that of the grand aisle. T
choir, which is the work of the late Mr. I
executed in the ancient Gothic stile, but th
tect has so happily blended simplicity wit
ment, as to produce the most pleasing eff
has also this peculiar advantage, that it ca
solemn occasions, be easily removed, a
be replaced without much trouble or e
The altar is extremely beautiful.

The great west window, set up in t
1735, is finely painted with representat
Abraham, Isaac, and Jacob; the twelv
Moses and Aaron; and the coats
g to king Sebert, Edward the Co
Elizabeth, George II. and dean W
of Rochester.

In a smaller window on the right, is a
supposed to be that of Edward the Black
the opposite is another which is

and the beautiful north window, which was put up in 1722, represents our Saviour with his twelve apostles, and the four evangelists.

In this venerable structure are twelve sepulchral chapels, containing several curious monuments of the sovereigns and nobility of Great Britain. These are the chapels of Henry VII. St. Benedict, St. Edmund, St. Nicholas. St. Paul, Edward the Confessor, Henry V. St. Erasmus, St. John the Baptist, St. John the Evangelist, St. Michael, and St. Andrew; the three last, however, are now laid into one.

The chapel of Henry VII. is situated to the east of the abbey, and is, in point of elegance, nearly the rival of that at King's college, Cambridge. The royal founder expended fourteen thousand pounds in this building, which he expressly designed as the mausoleum of himself and his descendants.

The ascent to the interior of this chapel is from the east end of the abbey, by steps of black marble leading to the gates, which are of brass, most curiously wrought in the manner of frame-work, having a rose and portcullis alternately on every other pannel. On the first entrance the eye is naturally directed to the roof, which is divided into sixteen circles of curious workmanship, and supported by twelve stately pillars, enriched with figures, fruitage, and other ornaments. The stalls are of brown wainscot, with Gothic canopies, and the arms and banners of the knights produce a fine effect. Here are many statues in niches; and in the body of the chapel is the superb tomb of the royal founder and his queen, with their figures recumbent in brass. Here also are some elegant monuments erected to the memory

of Margaret, countess of Richmond, queen Eli
beth, the unfortunate Mary Stuart, and seve
other illustrious personages.

Between the knight's stalls, under a broad m
ble pavement, is the royal vault, where repose
bodies of James I. William III. Anne, a
George II. The length of this chapel is nine
nine feet, the breadth sixty-six, and the heig
fifty-four.

In the chapel of St. Benedict are an ancie
tomb of free-stone, supporting a recumbent stat
of Langham, who was abbot of Westminster, a
archbishop of Canterbury; a curious monume
of black and white marble, erected in memory
Lionel Cranfield, earl of Middlesex; and a fi
monument of lady Frances, countess of He
ford.

At the entrance of St. Edmund's chapel is
alabaster statue of John of Eltham, second son
king Edward II. his habit is that of an arm
knight, and his head is encircled with a coron
of leaves. On a Grecian altar in the same cha
sits a statue of lady Elizabeth Russel, who is co
monly said to have lost her life by accidenta
pricking her finger: but this story seems to ha
no other foundation than a misapprehension of t
design; for, the statuary having represented h
as asleep, and pointing with her finger to
death's head under her right foot, it has been su
posed that the bleeding of her finger closed h
death, whereas the design seems rather
the serenity of her mind at the approa
which she considered only as a profou
of which the motto*, "Dormit, non mo

* She is not dead, but sleepeth.

tua est," is a clear confirmation. Here also ar monuments to the memories of John lord Russel lady Jane Seymour, William de Valence, an Mary countess of Stafford, wife to the unfortunat viscount, who suffered decapitation, in the reig of Charles II. on Tower-hill.

In the chapel of St. Nicholas are a magnificen temple of various coloured marble, erected in ho nour of Ann duchess of Somerset; a most sump tuous monument to the memory of lady Burleigh two beautiful pyramids, erected in remembranc of Nicholas Bagenail, and Anna Sophia Harley who died in their infancy; and several other ele gant monuments.

On the west side of this chapel is a beautifu monument to the memory of the late duchess o Northumberland, who is represented sitting o a sofa, and dispensing her bounty to a groupe o indigent beings who surround her. The figure on each side appear to be Faith and Hope, an those above are weeping genii mourning over he urn.

At the entrance of St. Paul's chapel is a lofty mo nument to the memory of Sir John Puckering, lor keeper of the great seal of England in the reig of queen Elizabeth. Here also are a magnificen monument of alabaster, with pillars of Lydia marble, raised to the memory of Sir Thomas Brom ley, privy counsellor and chancellor to queen Eli zabeth; an alabaster statue of Frances, countes of Sussex; and a very ancient monument of Lewi Robert, standard-bearer to Henry V.

The shrine of Edward, which stands in th centre of the chapel consecrated to that saint, wa once extremely magnificent, but is now neglec ed, defaced, and sadly abused. On the n

side of this chapel is an ancient tomb of admir
workmanship and materials, the pannels bein
polished porphyry, and the surrounding Mo
work of gold and scarlet: at the corners of
table are twisted pillars gilt and enamelled,
the statue of Henry III. upon it, is of gilded br
finely executed. The tombs of Edward I.
named Longshanks; John Waltham, twe
sixth bishop of Salisbury; Elizabeth Tudor, sec
daughter of king Henry VII.; and Eleanor, qu
of Edward I. must also be noticed in this place

Separated only by an iron screen, is the cha
of Henry V. which contains the magnifi
tomb of its founder, who acquired immortal hon
by the memorable battle of Agincourt; the sw
and shield of Edward III.; a waxen figur
Edmund Sheffield, duke of Buckingham; and
ancient chairs, which are used by the kings
queens of England at their coronation.
chantry over this chapel are an helmet, sh
and saddle, said to have been used by Henry V
the battle of Agincourt; and here also are some
rious models, designed by Sir Christopher W
and other eminent architects.

St. Erasmus's chapel contains some fine m
mens; among which those of Henry Carey,
cousin of queen Elizabeth; Thomas Carey,
tleman of the bed-chamber to king Charles I.
Thomas Cecil, earl of Exeter, claim partic
tice.

The chapel of St. John the Baptist contains
handsome monuments; that of John
shop of Westminster, and that of Sir Christo
Hatton. But in the chantry above, there
some waxen figures of queen Elizabeth, king

liam and queen Mary, queen Anne, and the famous earl of Chatham, in his parliamentary robes.

In the chapel of St. John the Evangelist are some handsome monuments, of which the most remarkable are inscribed to the memory of Sir Francis Vere, and of Sir George Pocock; the latter of whom acquired immortal reputation by his gallant conduct at the reduction of Geriah, Chandernagore, and the Havannah. The tomb of this hero is ornamented with a figure of Britannia, a fine medallion, and some emblematical devices.

The chapel of St. Michael contains some of the finest monuments in Westminster Abbey. The tomb of Joseph Gascoigne Nightingale and his lady, is the work of M. Roubiliac, and is justly admired by all judges of merit. Above is represented a lady expiring in the arms of her husband; beneath, slily peeping from a tomb, the king of terrors presents his dreadful visage, and points his unerring dart at the sinking figure, while the distracted husband seems to clasp her to his bosom, and attempts to defend her from the fatal stroke. Opposite to this beautiful monument is that of the earl and countess of Mountrath, which is equally entitled to our admiration from the grandeur of the design, and the extraordinary lightness of the execution. On the summit is a representation of the celestial mansions, and their blessed inhabitants; and on a sarcophagus beneath is the figure of the countess, in the attitude of rising from the grave and supported by an angel, who, with his right hand, points up to heaven, where a seat is prepared for her reception, and where another angel waits to crown her with a wreath of glory.

The chapel of St. Andrew contains monu
to the memory of several honourable person
but the most elegant are those of Sir Henry
ris, famous for his gallant conduct in the
Countries, during the reign of queen Eliza
and Susanna Jane Davidson, who is repres
just expiring, Death having pierced her
with his fatal dart: an angel supports the f
figure, and appears to offer consolation by
ing to the joys of futurity.

The tombs in the area and aisles of the c
are far too numerous to admit of descriptio
work of this nature. Suffice it, therefore, t
that many of them are indeed master-pieces
art of sculpture, and that among the most
brated, the spectator may recognise those
neral Wolfe, the earl of Mansfield, W
Shakspeare, Matthew Prior, John Milton,
Thomson, Nicholas Rowe, John Gay,
Goldsmith, Abraham Cowley, Geoffery Ch
George Frederick Handel, Sir Isaac Ne
and many others who have acquired immort
putation by the brilliancy of their genius, o
happy result of their extraordinary exertions

The cathedral church at York is a G
building, dedicated to St. Peter, and, by
persons, esteemed the finest in England, if n
perior to any thing of the kind in Italy; fo
the rules of proportion have been more s
observed than in most other Gothic struc
The west front is adorned with two regular
ers, connected and supported by the larges
thic arch in Europe, under which is the pri
entrance into the church. Over this arc
magnificent window, and another at the ea
is universally admired, being upwards of

feet in breadth, and seventy-five in height, and beautifully painted with scriptural histories, in a hundred and seventeen partitions. The most remarkable deficiency is in the lantern steeple, which terminates but indifferently, though it is finely ornamented, and has eight stately windows, measuring forty-five feet from top to bottom. At the ends of the choir are two beautiful stone screens, one of which separates it from the middle of the church, and the other terminates it behind the altar, to which there is a graceful ascent of sixteen steps. The carved wood-work of the choir is very ancient, and adorned with many knotted pinnacles. The south end of the cathedral is beautified with a circular window, called the marigold window, the glass being stained of that colour; and at the north end are five lights, reaching almost from top to bottom, said to have been erected at the charge of five maiden sisters, which may be considered as one stately window, the painting on which represents a rich embroidery of Mosaic needle-work. This church extends in length five hundred and twenty-five feet, in breadth a hundred and ten, and in height ninety-nine feet. In a tower on the west side is a peal of twelve bells, the tenor of which weighs fifty-nine hundred weight. The chapter-house is an octagon Gothic building, sixty-three feet in diameter, ornamented with windows of painted glass, and finished with an arch or concave about sixty-eight feet in height. The roof, which has been finely painted and carved, but is now much sullied, has not a single pillar to support it, but depends entirely upon one pin, placed geometrically in the centre. It has thirty-two stalls round it, all of fine marble.—In the

vestry-room are preserved several antiquities
ticularly the famous horn, so called from its s
but made of ivory, by which one Ulphus, a S
governor, disinherited his two sons, and
stowed his whole estate on this cathedral.

Next to York cathedral, in point of exte
that of Lincoln, a stately Gothic pile, of whi
monks thought so highly, that they used to sa
devil could never look upon it without a fro
malignity; whence arose the proverb, gen
applied to envious or malicious persons,
looks as the devil over Lincoln." It is cer
a lofty and magnificent structure, and fr
elevated situation may be seen over five
counties, fifty miles to the north, and thirty
south. The catharine-wheel windows of th
thedral are extremely curious, and the ch
house, cloisters, and library, are universall
mired. The great bell, called Tom of Li
measures twenty-two feet eight inches in ci
ference; weighs nearly five tons; and wil
four hundred and twenty-four gallons, ale
sure.

Salisbury cathedral is, of a Gothic buildi
most elegant and regular in Great Britain.
begun in the year 1219, and finished in
when it was consecrated in the presence of
III. and a great number of the bishops and
lity. It is in the form of a lantern, with a
tiful spire of free-stone in the middle, which
counted the most lofty in England. The len
the church is four hundred and seventy-eigh
the breadth seventy-six, and the height
ding eighty feet. The outside of this
ruly magnificent; but a spectator is
ted with the interior, for thos

carving is tolerably good, the painting is very indifferent.

It is remarked of this structure, that its doors are equal in number to the months of the year, its windows to the days, and its pillars and pilasters to the hours.

The bells for the service of this church hang in a strong steeple, erected in another quarter of the church-yard: the walls of the spire, which toward the top are litle more than four inches thick, being judged too weak for such a weight of metal.

The chapter-house is an octagon, one hundred and eighty feet in circumference, and yet the roof has no other support than one slender marble pillar in the centre; so that the construction of the building is reckoned one of the greatest curiosities of the kind in Europe.

The cathedral church of Peterborough, formerly an abbey, is equally famous for its antiquity and the beauty of its architecture; being more than a thousand years old, and universally considered as one of the noblest Gothic buildings in the world. It is four hundred and seventy-nine feet long, and two hundred and three broad in the transept from north to south; the breadth of the nave and side aisles is ninety-one feet; and the west front is the most magnificent in England, being supported by three noble arches, with columns curiously adorned. The windows of the cloisters are finely stained with figures of the founders of the monastery, and various subjects from the history of the bible. Here are monuments of Catharine, queen of Henry VIII. and Mary queen of Scots, who were both buried in this cathedral, though the body of the latter is said to have been removed to Westminster Abbey by

son king James the First. Here is likewise a monument of one Scarlet, the sexton, who died at the age of ninety-five, after having, as his epitaph declares, buried both the queens, and two successive generations of all the house-keepers in the town. The abbot of Crowland in Lincolnshire, and his monks, fleeing to this monastery for protection from the Danes, were overtaken, and murdered in a court of the abbey, called the monk's church-yard, and their effigies may still be seen upon a stone which was erected over their common grave.

Winchester cathedral is a large and venerable fabric, which was begun in the eleventh century, and not finished till the reign of Edward III. in the fourteenth century. Instead of a steeple or spire, this church has only a short tower, about one hundred and fifty feet high, with a flat covering. The length of it from east to west is five hundred and forty-five feet, including a chapel at the east end, called our Lady's Chapel, which is fifty-four feet long, and the breadth of the body and cross aisles is eighty-seven feet; the choir is one hundred and thirty-six feet long, and forty broad; the length of the great cross aisle is about one hundred and eighty-six feet; the nave or western body of the church is above three hundred feet long, and is reckoned the most spacious in England. The roof of the choir is adorned with the arms of the Saxon and Norman kings. The font which was erected in the time of the Saxons, is of black marble, and ornamented with sculptures in bass relief, representing the miracles of some tutelary saint. The ascent to the choir is by eight steps, at the top of which are two copper statues finely cast, one of king James the

First, on the right hand, and the other of Charles the First on the left. The bishop's throne and the stalls of the dean and prebendaries, are beautifully adorned with gilt carved work; the ascent to the altar is of marble steps; and the pavement is very curious, being inlaid with marble of different colours, and forming a variety of figures. The altar piece, which is accounted the noblest in England, consists of a lofty canopy of wood-work, projecting over the communion table, like a curtain, with gilt festoons, and other ornaments. The communion rail is extremely neat; and on each side of the altar are stone vases, with golden flames issuing out to the roof of the church: the great east window is remarkable for the paintings upon the glass, representing several saints and bishops of this church. Several of our Saxon kings are interred here; and in this church lies the marble coffin of William Rufus, which being opened by the soldiers in the civil wars under Charles I. they found on his thumb a gold ring, adorned with a ruby. Among several pompous monuments is that of William of Wickham, who was bishop of this church when it was finished.

The cathedral church of Durham is a magnificent pile, four hundred and eleven feet long, and eighty feet broad, with three spacious aisles, one in the middle, and one at each end; that in the middle is one hundred and seventy feet long, the eastern aisle is one hundred and thirty-two feet long, and the western one hundred feet. In the western aisle was a chapel of the Virgin Mary, the outside of which was adorned with two handsome spires, covered with lead, the towers of which are still standing. The whole building is curiously vaulted, and supported by large pil-

At the entrance into the choir there is a hand
screen, one hundred and seventeen feet long,
thirty-three broad. Many of the windows
very curious, particularly the middle windo
the east, which comprehends all the breadth o
choir, and is composed of twenty-four lights.
This cathedral is adorned with a fine cl
on the south side, formerly glazed with pai
glass. On the east side is the chapter-house,
nery, and a building called the old library.
chapter-house, in which sixteen bishops are
terred, is a stately room, seventy-five feet
and thirty-three broad, with an arched ro
stone, and a beautiful seat at the upper end fo
instalment of the bishops. On the west side o
cathedral are the dormitory, and on the north
new library, a large lightsome building, on
site of the common refectory of a convent.

Litchfield cathedral, which was founded
1148, suffered much in the civil wars
der Charles I. but was so effectually repa
after the restoration, that it is now one of
noblest Gothic structures in England.
length of the interior is four hundred and fifty
including the choir, and the breadth is about
feet. There is a fine lofty steeple over
the church; the front is adorned
bd portico, and over that are two corresp
spires. Above the portico are twenty-six
of the prophets, apostles, and kings of
as large as life; and there are also se
es on the inside of the church. The ch
ly paved with alabaster and Cannel
nitation of black and white marble; an
the choir is a neat chapel.

The cathedral church of Gloucester is an
cient but magnificent fabric; and its tow

ght to be one of the neatest and most curious
es of architecture in the kingdom. In this
ce are twelve chapels, adorned with the tombs
ing Edward the Second, Robert duke of Nor-
dy, son of William the Conqueror, and many
r illustrious persons. There is also a whisper-
gallery over the east end of the choir, leading
one side of it to the other, which is deemed
eat curiosity.

he parish church of St. Stephen, Walbrook, in
city of London, deserves particular notice, be-
reputed the master-piece of the celebrated Sir
istopher Wren, and thought to exceed most
ern structures in proportion and elegance. It
a steeple which rises plain to a considerable
ht, and is then surrounded with a ballustrade,
in which rises a very light and elegant tower,
vo stages; the first adorned with Corinthian,
second with Composite columns, and covered
a dome, whence rises the vane. The outside
is church is plain and void of ornament, but
he centre of the roof is a large dome, finely
portioned to the church, and divided into small
partments decorated with great elegance, and
vned with a lantern; while the roof, which is
divided into compartments, is supported by
atiful Corinthian columns raised on pedestals.
his church is seventy-five feet in length, and
ty-six in breadth; the height of the middle
is thirty-four feet, and of the cupola and lan-
fifty-eight feet: on the sides under the
er roofs are only circular windows, but those
ch enlighten the upper roof are small arched
s; and at the east end are three very noble
ied windows.

The church of St. Mary le Bow, in London, is

the most eminent parochial church in the city; but deserves particular mention here, on account of its steeple, which is accounted a master-piece in a peculiar kind of building, that has no fixed rules to direct it, and that cannot be reduced to any settled laws of beauty. It is observed of this steeple, that, if it be considered only as a part of some other building, it can be esteemed no other than a pleasing absurdity; but if considered either in itself, or as a decoration of a whole city in prospect, it is not only to be justified but admired.

The tower is square from the ground, but with more ornament as it advances. The principal decorations of the lower part are about the entrance, which is a lofty, noble, and well-proportioned arch, on two of the sides faced with a bold rustic, and raised on a plain solid course from the foundation. Within the arch is a portal of the Doric order, the freeze ornamented with triglyphs, and with sculpture in the metopes; over this arch is an opening with a small balcony, which answers to a window on the other face. The first stage is terminated by an elegant cornice, over which again rises a plain course, where a dial projects into the street called Cheapside. Above this is in each face large arched windows, with coupled Ionic pilasters at the sides near the corners.

The cornice over these windows supports an elegant ballustrade, with attic pillars over the Ionic columns, supporting turrets, each composed of four handsome scrolls, which join at the top, where are placed urns with flames. From this part the steeple rises circular, in a plain ...ce, to the height of half the scrolls, and upon ...re raised a circular range of Corinthian co-...; while the body of the steeple is continued

id and plain within them: these support a se-
d ballustrade, with very large scrolls, extend-
from it to the body of the steeple. Above
e is placed a series of Composite columns, and
1 the entablature rises another set of scrolls
porting the spire, which rests upon four balls,
is terminated by a globe, whence rises a vane
ie form of a dragon.

There are many other noble and magnificent
rches in London and Westminster, which
ht be taken notice of as excellent pieces
rchitecture: but, as our design is to men-
such buildings only as are most remark-
, we shall finish the account of the Lon-
churches by a short view of the parish
rch of Covent Garden, which was originally
t by the celebrated Inigo Jones, and is esteem-
y the best judges one of the most simple and
ect pieces of architecture in the world. In
front is a plain but noble portico of the Tuscan
er, the columns are massy, and the intercolum-
ion large, which has an air of noble simplicity:
building, though as plain as possible, is happily
portioned; the roof is flat, and though of great
nt, is supported by the walls alone without
mns; the walls are brick covered with plaister,
the corners of stone.

At Boston, in Lincolnshire, is a church, reckon-
the largest parochial church, without cross
s, in the world, being three hundred feet long
in the walls, and one hundred feet wide; the
ing is of Irish oak, supported by twenty-four
slender pillars. This church is said to have
e hundred and sixty-five steps, fifty-two win-
vs, *and twelve* pillars, answering to the days,
ks, *and months* of the year; its tower, which

and is one hundred and twenty feet in length, forty feet in breadth, and its cieling eighty feet high.

Peckwater-square, to the north-east of the grand quadrangle, is perhaps the most elegant edifice in the university. Three sides of it, each containing fifteen windows in front, are uniform; over the five central windows, in each side is a projecting pediment supported by beautiful columns; while Ionic pilasters support the entablature and ballustrade of the other parts.

Of the nineteen other colleges belonging to this university, the most remarkable in point of building are the following:

Queen's College, situated on the north side of the High street, has a front which is formed in the stile of the palace of Luxemburg, and is at once magnificent and elegant. In the middle of it is a superb cupola, over a statue of Queen Caroline. This college is one entire piece of well executed modern architecture; the whole area on which it stands is an oblong square, three hundred feet in length, and two hundred and twenty in breadth, which being divided by the hall and chapel, is formed [illegible] courts [illegible] south court, is one [illegible] and forty feet in length, and one hundred and thirty in breadth [illegible] by a beautiful cloister, except on the north side, which is formed by the chapel and hall, and [illegible] finished in the Doric order. In the centre, over a portico leading to the north court, stands a cupola supported by eight Ionic columns. The north court is one hundred and thirty feet long, and [illegible] on the west stands the library, which is of the Corinthian order; on the east side of this edifice runs a cloister, and the opposite side is adorned with statues of the founder

benefactors, and other pieces of sculpture; the room within is highly finished. The book-cases, which are of Norway oak, are well carved, and in the cieling are some admirable compartments of stucco. The chapel, which is one hundred feet long and thirty broad, is ornamented in the Corinthian order, with a beautiful cieling of fret-work; and the windows are all of fine painted glass: the hall is fitted up in the Doric order, and has an admirable proportion, being sixty feet long and thirty broad, with an arched roof of a correspondent height.

University College, is a spacious, superb, and uniform structure, extending its magnificent front two hundred and sixty feet along the south side of the High street, opposite to Queen's College, having two stately portals, with a tower over each: the western portal leads to a handsome Gothic quadrangle of one hundred feet square. Over the eastern portal, on the outside, is an admirable statue of Mary, queen of William III. On the south of the eastern quadrangle are the hall and chapel, the latter of which is ornamented with some beautiful windows of painted glass.

New College is separated from Queen's College by a narrow lane on the south. The first court is about one hundred and sixty-eight feet in length, and one hundred and twenty-nine in breadth, and in the centre is a statue of Minerva. The north side of this court, which consists of the chapel and hall, is a noble specimen of Gothic magnificence: the two upper stories of the east side form the library; the chapel, for beauty and grandeur, exceeds all in the university. The anti-chapel, which is supported by four pillars of fine proportion, runs at right angles to

choir, and is eighty feet long and thirty-six broad; the entrance to the choir is by a Gothic screen, of a beautiful construction; the choir is one hundred feet long, thirty-five broad, and sixty-five high; and the windows and altar-piece are finely painted: near the chapel is a cloister, one hundred and forty-six feet in length on two sides, and one hundred and five on the other two; contiguous to it, on the north, is a large and lofty tower, with ten bells. The hall is an august Gothic room seventy-eight feet long, thirty-eight broad, and forty-three high: it is adorned with several fine portraits, and the wainscot is curiously carved.

In the bursary is shown the crosier of William of Wickham, bishop of Winchester, who founded this college in 1386: this is one of the richest curiosities, and almost the only one of its kind now remaining in Britain: it is nearly seven feet high, and consists of silver gilt, embellished with a variety of the nicest Gothic workmanship, being charged with figures of angels, and the tutelar saints of the cathedral church of Winchester, executed with an elegance equal to that of a more modern age. It is finely preserved; and, notwithstanding the lapse of some hundred years, has lost but little of its original splendor and beauty.

From the first quadrangle there is a passage into another, called Garden-court, the beautiful area of which, by means of a succession of retiring ings, displays itself gradually in approaching the den, from which it is separated by an iron pale, one hundred and thirty feet in length.

All-Soul's College is situated in the high street, *westward* of Queen's College, and consists of *two courts*: the first court is a Gothic edifice, one

hundred and twenty-four feet in length, and se
venty-two in breadth; and the chapel on the north
side is a stately pile: the anti-chapel, in which
are some remarkable monuments, is seventy feet
long and thirty broad: the entrance to the inner
chapel, which is of the same dimensions, is by a
grand flight of marble steps, through a screen con-
structed by Sir Christopher Wren. The spacious
environ of the altar consists of the richest red
veined marble, and is adorned with fine painting:
the compartments of the cieling are embellished
with carving and gilding, and the whole has an
air of much splendor and dignity.

The hall, which forms one side of an area to the
east, is an elegant modern room, adorned with
many busts and portraits. Adjoining to the hall
is the buttery, which is a well proportioned room,
of an oval figure, and has an arched stone roof,
ornamented with curious workmanship.

The second court is a magnificent Gothic qua-
drangle, one hundred and seventy-two feet in
length, and one hundred and fifty-five in breadth.
On the south are the chapel and hall; on the west
a cloister, with a grand portico; on the north a
library; and on the east two superb Gothic towers
in the centre of a series of fine apartments.

The library exceeds every thing of the kind in
e university, being two hundred feet in length,
irty in breadth, and forty in height; and finished
the most splendid and elegant manner. The
om is furnished with two noble arrangements of
k-cases, one above the other, supported by
ric and Ionic pilasters; the upper class is form-
in a superb gallery, which surrounds three
s. About the middle of the room, on the
side, is a recess equal to the breadth of th

schools, and the two colleges of Brasen Nose and All Souls, stands Radcliffe's library; a magnificent pile, built upon arcades, enclosing a spacious dome, in the centre of which is the library itself, and into which there is an ascent by a flight of spiral steps, well executed. The library, which is a complete pattern of elegance and majesty in building, is adorned with fine compartments of stucco. It is enclosed by a circular series of arches, beautified with festoons, and supported by pilasters of the Ionic order. Behind these arches are formed two circular galleries, above and below, where the books are disposed in elegant cabinets; the compartments of the cieling in the upper gallery are finely stuccoed: the pavement is of two colours, and made of a peculiar species of stone, brought from Hartz Forest in Germany: the finishing and decorations of this attic edifice are all in the highest taste imaginable; and over the door is a statue of the founder, Dr. John Radcliffe, who left forty thousand pounds for the erection of this library, with an annual salary of one hundred and fifty pounds to a librarian, and one hundred pounds towards purchasing new books. In consequence of this legacy, the first stone was laid on the seventeenth of May, 1737, and the library was opened, with great solemnity, on the thirteenth of April, 1745.

There is belonging to this university another most magnificent structure, called the Theatre, erected for celebrating the public acts of the university, the annual commemoration of benefactors, and other solemnities. The building is circular form, and of sufficient magnitude to tain three thousand persons, including the galleries; the front of it, which stands opposite to

the divinity school, is adorned with Corinthian pillars, and several other decorations: the roof is flat, and not being supported by columns or arch-work, rests on the side walls, which are distant from each other eighty feet one way, and seventy the other: this roof is covered with allegorical paintings. The vice chancellor, with the two proctors, have raised seats in the centre of the semicircular part; on each hand are the young noblemen and doctors; the masters of arts in the area; and the rest of the university and strangers in the galleries. This structure was built by Sir Christopher Wren in 1669, at the expence of Dr. Sheldon, archbishop of Canterbury, then chancellor of the university, who having bestowed fifteen thousand pounds in building it, endowed it with two thousand pounds, to purchase lands for its perpetual repair.

On the west side of the theatre is an elegant modern structure, called the Ashmolean Museum, built also by Sir Christopher Wren, in the year 1683, at the expence of the university. Its front towards the street is sixty feet in length; it consists of two stories, and has a grand portico, remarkably well finished in the Corinthian order. The lower story is a chemical laboratory, and the [illegible] is a repository of natural and artificial curiosities, and Roman antiquities, chiefly collected by Elias Ashmole, Esq. and his father-in-law, Sir William Dugdale.

Near the Ashmolean museum, and almost contiguous to the theatre, is another building, called the Clarendon Printing-house, which surpasses every thing of the kind in Europe. It was founded in 1711, and built partly by the money arising to the university from the profits of the co-

Lord Clarendon's history of the [illegible] copy-right of which was devised by his [illegible] ship to the university. This magnificent str[illegible] ture is 115 feet in length, with spacious porti[illegible] in the north and south fronts, supported by [illegible] lumns of the Doric order; the top of the wall adorned with statues of the nine muses, and Homer, Virgil, and Thucidides. The east p[illegible] of the building is chiefly appropriated to the pri[illegible] ing of bibles and common prayer books, and [illegible] west is allotted to other books of literature a[illegible] languages.

In the university of Cambridge, Clare-hall reckoned one of the neatest and most uniform str[illegible] tures. It is a square building, three stories hi[illegible] the materials are free stone, and the work is D[illegible] ric; the court is entered by a lofty gatehou[illegible] adorned with two rows of pillars. There is a[illegible] ther building contiguous to the college, the up[illegible] story of which forms a library, and the lowe[illegible] chapel.

King's college is an unfinished pile, the ori[illegible] nal plan of the building having been executed o[illegible] in part; yet the chapel, though built at differ[illegible] and distant times, is said to be one of the fin[illegible] Gothic structures in the world. It is three hu[illegible] [illegible] and sixteen feet long, eighty-four broa[illegible] [illegible]ninety high on the outside; yet it is s[illegible] [illegible] merely by the symmetry of its parts, ha[illegible] [illegible]o pillar within to support its roof, which, [illegible] well as the sides, is of free stone. The choir paved with marble, and adorned with two ro[illegible] of stalls of carved wood, and the windows a[illegible] [illegible]curiously painted.

[illegible]ity college, in this university, consists [illegible] [illegible]cious squares or courts, in one of wh[illegible]

a library has been lately erected of free stone, supported by two rows of pillars, and said to be one of the most noble and elegant structures of the kind in the world.

The hall is one hundred feet long, and is embellished with portraits of lords Bacon and Russel; Dryden, Cowley, Coke, Spelman, and various other celebrated characters, who received their education at this college; the library, for elegance and decoration, may vie with some of the finest in Europe, and the chapel is a very noble edifice.

The Senate House is a very superb structure, of the Corinthian order, situated in the middle of the town; and the public library, which forms the west side of a new square, is justly entitled to the admiration of its visitors. Among many other curiosities which are preserved in this place we may enumerate a copy of the magna charta on vellum; a sheet of paper four yards long, by one and a half wide; and a large collection of choice manuscripts.

The great kirk at Edinburgh, formerly the cathedral church of that city, is a magnificent structure, situated in the High Street, and dedicated to St. Giles. It is built of hewn stone, in the form of a cross, and is adorned with some stone pillars and arches, and a tall stately tower, with a large open cupola, representing an imperial crown. Here is a noble gallery for his majesty's commissioner, at the general assembly of the church of Scotland, who hold their sessions in a large chapel on the south-west part of this church. In the steeple there is a set of bells, which are not rung out; but tunes are played on them with keys, in the manner of a harpsichord; and this is performed

every day, except Sundays and holidays, from an hour after eleven o'clock in the foren to half an hour after twelve, by a man who ceives a yearly salary from the city.

In the city of Glasgow is a church, which formerly the cathedral of this diocese, and is dicated to St. Mungo, who was bishop here a the year 560, and lies buried between four pi in a part of the cathedral, called the Barony. church is a vast and stately edifice; and the veral rows of pillars, the remarkably tall to and the lofty spire, which is the highest in land, and rises from a square tower in the m of the cross, render it truly worthy of ad tion.

The college of this city is a magnif fabric, consisting of two large quadran built with stone, adorned with a lofty tower, many fine turrets, and separated from the ci a very high wall. The front of the college, v faces the city, is of hewn stone, and is recko beautiful piece of architecture.

Old Aberdeen was the see of a bishop, an a stately cathedral, called St. Machar's, in v is a most curious monument, erected to the mory of bishop Ephlingston, who rebuilt church in the year 1500.

King's college, in the university of this not inferior to any building of the kind in d. It consists of one large quadrangle hurch is of hewn stone, and has a fine towe top of which is vaulted with a double cross round that is a magnificent stone crown, wit coronets, supported by as many stone pillar a stone globe with gilded crosses, enclosi crown.

church, dedicated to St. Magnus, at Kirk-
, in Pomona, one of the Orkney islands, was
ierly a cathedral, and is still a beautiful and
nificent structure. It is built of free stone, and
a fine steeple in the middle, erected on four
e pillars: the roof of this church is supported
ach side by fourteen pillars, and the gates are
tily chequered with red and white polished
es.

oslin, in the shire of Edinburgh, is famous
a stately chapel, which is reckoned one of the
t curious pieces of architecture in Europe,
e being not two cuts of one sort in the whole
cture. It is a Gothic building, founded in the
: 1440, by William St. Clair, prince of Ork-
, and duke of Holdenburgh. This edifice is
ounded with buttresses and niches, each of
ch is adorned with statues as large as life. The
dows are very magnificent; but the most cu-
s part of the building is the vault of the choir,
a pillar distinguished by the name of the
ee's pillar.

he cathedral church in the city of Dublin in
and is a fine old building, and its lofty steeple,
ied roof, and stone pavement, are much ad-
ed as curious pieces of workmanship.

fter this account of the sacred edifices that
rn the united kingdom of Great Britain and
and, it is proper to give a brief description of
e of the royal palaces, among which Windsor
tle, in Berkshire, deservedly claims the pre-
nence; not only from its structure, but from
beauty of its situation, with which Wil-
a the Conqueror was so struck, that he pur-
sed the place from the monks of Westminster
ey, and here built himself a hunting seat;

The round tower, which is the residence o constable, or governor, is built in the manne an amphitheatre, and is very lofty and mag cent.

The western square, called the Lower W is of the same breadth with that to the east, is considerably longer. The chapel of the o of the garter, dedicated to St. George, was l by king Edward III. and has been so comple repaired and superbly decorated under the di tion of his present majesty, that it is univers admired on account of its beauty, elegance, happy unison of parts. In this chapel the knights installed, and in the choir, each of them h seat or stall, with the banner of his arms fixed it. Here is also a throne for the sovereign, stalls for the poor knights, who live in a sor hospital, or college, on the south side of square. The paintings in this edifice are tremely beautiful, but too numerous to adm description in a work of this nature.

To what has been said of this beautiful pal it may be added, that, though it wants a gar its two parks, and its forest, abundantly sup that deficiency; one of the parks, called Little Park, is above three miles round; the o is about fourteen miles, and the forest betw thirty and forty.

The royal palace of Hampton Court, al twelve miles from London, is a very magnific building, situated between two parks, which, gether with its gardens, are about five miles circumference, and are watered on three sides the river Thames, so that a more beautiful si tion can scarcely be conceived. This palace originally built by Cardinal Wolsey, wh

nished it in the most sumptuous and costly ma
ner. The chambers were adorned with ri
hangings, containing two hundred and eigh
silk beds, for the reception of strangers only, a
the place abounded with gold and silver plat
but it excited so much envy against the cardin
that he was obliged to resign it to king Hen
VIII. who greatly enlarged it. King Charl
the First delighted much in this place; and ki
William and queen Mary made still greater add
tions to it, and improved the gardens not on
with walks, and a great variety of bowers, b
with green-houses, hot-houses, and basons
water.

This palace now consists of two large court
besides the court for officers and servants. O
one side of the outward court is a chapel, built b
queen Anne; and on the other side is a portic
supported by Doric pillars, that leads to the gre
stairs, which are finely painted. The inner cou
was built by king William, who furnished th
apartments in a fine taste. The great gallery
orned with the five famous cartoons of Raphae
in, brought by king William into England
valued at four hundred thousand pounds ste
g. In another gallery there are many fin
intings, with other curiosities.

Kensington palace, about two miles from Lon
don, was originally the seat of chancellor Finch
afterwards earl of Nottingham, from whom
was purchased by king William III. who con
verted it to a royal palace, and made a road t
it through St. James and Hyde parks, with lamp
posts, erected at equal distances, on each side
The building is irregular, but the royal apart
ments are sumptuous, and contain some very fi

tings. From the lower court the entrance is
ugh a large portico, into a stone gallery that
s to the great stair-case, consisting of several
ts of black marble steps, adorned with iron
sters finely wrought.

he gardens belonging to this palace are three
s in compass, and are kept in good order.
y were first enlarged by queen Mary, con-
of king William, and greatly improved by
:n Caroline, who brought into them, from
.e park, the Serpentine river.

. James's palace is the winter and town resi-
:e of the court, and stands on the site of an
ital dedicated to St. James, and founded by
: pious citizens before the conquest, for four-
leprous females: from this hospital the palace,
:h was built by king Henry VIII. soon after
dissolution of religious houses, derived its
e.

his is an irregular brick building, of a mean
:arance from without, but it contains many
nificent apartments; and is said to be the
: commodious for regal parade of any in Eu-

. the front, there appears little more than an
gate-house, through which there is an en-
:e into a square court, with a piazza on the
side, leading to the grand stair-case: be-
l this court there are two others, which have
nuch of the air of a royal palace. The win-
, however, look into a pleasant garden, and
nand a view of St. James's park. This place,
1 the palace was built, consisted of an uncul-
ed swampy piece of ground, which the king
sed, and converted into a park: he also laid
into walks, and collected the water into

of Somerset, uncle to king Edward VI. upo
whose attainder it fell to the crown; and Ann
of Denmark, consort of James I. kept her cou
here. It was also inhabited, for some time, b
Catharine, queen of Charles II. and was settle
on queen Caroline, in case she had survived h
royal consort George II.

The architecture of old Somerset House was th
mixture of Gothic and Grecian, introduced int
Great Britain in the reign preceding its erectio
The back front and the water-gate were bui
from a design of Inigo Jones, after the year 1623
but the present magnificent building is after a de
sign by Sir William Chambers. The front ne
the street is composed of a rustic basement, su
porting a Corinthian order of columns, crowne
in the centre with an attic, and at the extremiti
with a ballustrade. The basement consists
nine noble arches; three of which form the pri
cipal entrance, while the remaining six are fille
with windows of the Doric order, and adorne
with pilasters, entablatures, and pediments.

The most beautiful apartments in this noble ed
fice are appropriated by the Royal Society, th
Antiquarian Society, and the Royal Academy
other parts are occupied by various publ
and the court is embellished with a stat
resent majesty. The terrace is reared
stic basement, and commands an enchan
rospect of part of the river, with Blackfria
Westminster bridges.

The royal palace of Holy Rood, at Edinburg
derives its name from its situation on the site of
abbey of Augustine monks, called Holy Roo
abbey, founded by king David I. of Scotland
lay consumed by fire all but the abbey church,

which several of the kings and queens of Scotlan lie interred, and which, though in a ruinous con dition, is still standing.

This palace was originally built by king Jame V. and rebuilt by Charles II. It is a magnificen stone edifice, of a square form, adorned with ex cellent carvings, and supported by pillars of th different orders of architecture. It consists o four courts; the first of which is as large as th other three put together: it has four considerabl entries, three in the west front, and another in th east, besides several passages into the gardens The principal entrance is grand and majestic, bein adorned with stone pillars, and a cupola rising i form of a crown, with a ballustrade round it The front is adorned by four tall stately towers two of which are part of the original buildin erected by king James V. that were left standing The inner court is a noble building, beautifie with a piazza all round, of free stone, from whic there is access to the royal apartments, which ar very magnificent; and here is a long gallery furnished with pictures of all the kings of Scotland beginning with Fergus the first king, who is sup posed to have reigned three hundred and twent years before the christian era; down to the revo lution, in the year 1688: the most eminen princes, and all those of the house of Stuart, ar painted at full length. The lodgings are trul magnificent, and richly furnished. The grea staircase, and many of the apartments in this edi fice, run exactly like those of St. James's pa lace; but the state-rooms are much higher an larger.

In the chapel of this palace king James VII of Scotland, and II. of England, erected a su

perb throne for the sovereign of the order of th
thistle, or St. Andrew; and twelve stalls for th
knights companions of that order, all of oak, an
carved by the most eminent artists of that time
The floor is beautifully paved with marble, but th
roof has fallen in, from its excessive weight, a
now lies in ruins.

The duke of Hamilton is hereditary keeper
Holy Rood palace, in which he has a sumptuo
apartment. The gardens are truly delightful, an
the park on the south side is four miles in circum
ference.

Among the noblemen's seats in this island
which are celebrated for their magnificence, th
of the duke of Devonshire, situated in the Pea
of Derby, may deservedly claim our first atte
tion.

Chatsworth House stands on the east bank
the Derwent, having that river on one side, an
on the other a very high hill, finely covered wi
wood. Over the river is the approach to th
mansion by an elegant bridge of three arches, o
pannelled with some fine figures, sculptured b
Cibber. The house is built in the Ionic orde
with a flat roof, surrounded by a neat ballustrad
its form is nearly a square, of about a hundre
and ninety feet, enclosing a spacious quadrangul
court, having a fountain and a statue of O
plants in the centre. The principal entrance
is by a noble flight of steps to a terra
tends the whole length of the building
sculptured trophies on the fronts whi
quadrangle have a fine effect.
, which measures sixty feet by twenty
is rather dark, but it has an air of cons
grandeur, and the ceiling, end, and s

:, are painted with beautiful representations of assembly of the gods; Julius Cæsar sacrificing; the assassination of that famous hero at the : of Pompey's statue. From the hall a double ht of steps and a long gallery conduct to the pel, which is elegantly fitted up, and deco- :d with some beautiful carved work and paint- s. The altar-piece, by Verrio, represents Redeemer reproving the incredulity of St. omas; and the cieling is ornamented with a : painting of the ascension. The state apart- nts, on the south side of the house, contain many : portraits and other paintings; but these are med inferior to the beautiful carved ornaments Gibbons; of whom it has been said, that "he s the first artist who gave to wood the airy itness of flowers, and chained together the va- is productions of the elements with a free dis- er natural to each species."

The park belonging to this noble edifice ex ds through a circumference of nine miles, and inely diversified with hill and dale, together h various plantations, which range in beautiful :eping masses over the inequalities of the und.

Near the south and south-east sides of the se, are those water-works, which, about sixty rs ago, gave the gardens of Chatsworth ex- rdinary celebrity. The principal of these is cade, which consists of a series of steps, ex- ing a considerable distance down a steep crowned at the top by a temple, that is sup- d with water from a very capacious reservoir. This fane," says Mr. Warner, "should be de- ed to *Mercury*, the god of deceit, as a piece ry is practised upon the incautious stran

...its very sanctuary; from th...
...a multitude of little fountains...
...while he is admiring the prospect fro...
...hill, and quickly wet him to the skin.
...this cascade is put in motion, the wa...
...with prodigious force from the roof and ...
...of the temple, and falling into a basin ...
...the building, is thence discharged down ...
...of steps. Among the other curiosities ...
...here are a triton and some sea-horses, fr...
...heads small streams issue; a fountain wh...
...up water to the height of ninety feet; ...
...pal tree, representing a decayed wil...
...every leaf of which water is made to ...
...the turning of a cock, so as to form a ...
...shower.

On the summit of the eminence th...
...the east side of Chatsworth House, is th...
Tower, a building said to have been e...
...station where ladies might partake in ...
...of stag-hunting, without incurring ...
...as its height enabled them to ov...
...surrounding hills. In another part of th...
...to the north of the bridge is another ...
...called "the Queen of Scots' Bower"...
...garden where that unfortunate prin...
...many of the tedious hours of her confine...
...Woodstock House, at Woodstock in O...
...grand magnificent pile, built at ...
...to perpetuate the memory of t...
...obtained under the comman...
...Churchill, duke of Marlborough, over ...
...the Bavarians, at the village of Blenh...
...side of the Danube.

The front of this noble edifice is ...
...hundred and fifty feet in extent, and ...

mented. The eastern gate leads into the first quadrangle of offices: from which the visitor passes into the area and through a superb portico to the hall, which is sixty-seven feet high, sixty long, and of a proportionable height. The cieling is finely painted by Sir James Thornhill, and represents victory crowning the heroic duke, and pointing to the battle of Blenheim.

The saloon is very lofty, and magnificently lined in the lower part with marble, in the Italian style; in the compartments above the basement are depicted the different nations of the world in their characteristic dresses; and the painted cieling represents John, duke of Marlborough, in the glorious career of victory, arrested by the hands of Peace, while Time reminds him of the rapidity of its own flight.

The library is a most magnificent apartment, supported by solid columns of marble, and occupying the entire west front: here is deposited the grand Sunderland collection of books, consisting of twenty thousand volumes, in various languages, arts, and sciences; and here also is a fine statue of queen Anne, in her coronation robes.

All the apartments of this palace are furnished with great magnificence; and the tapestry and paintings attract universal attention.

The gardens, or pleasure grounds, contain about two hundred acres of land, and are laid out in [illegible] happiest manner; and the park, which is [illegible]rds of twelve miles in circumference, is one [illegible]ued galaxy of delightful prospects, and [illegible]diversified scenery. A triumphal arch at [illegible]rance from Woodstock, a beautiful obelisk, [illegible]*her additions* were made to this palace [illegible]*after the* decease of the gallant hero, [illegible]

rder, with the richest cornice, frieze and arc
ave: the front, towards the garden, is plain
ut very bold and august: the cielings are rich
ilt and painted, and the apartments are orn
ented with many valuable paintings, and oth
uriosities. The garden contains a serpentine rive
vith a bridge over it; and is elegantly decorate
vith statues, buildings, a magnificent obelisl
cascade, an orangery, slopes and vistas.-
Here is also a terrace, commanding a fine pro
ject of the river Thames, and the neighbourin
country.

But of all the gardens in Great Britain, non
equal those at Stow in Buckinghamshire, a seat be
onging to the marquis of Buckingham, and built b
ord viscount Cobham The entrance to Stow gar
lens, on the south, is between two square pavi
ions of the Doric order, designed by Sir Joh
Vanbrugh, which are no sooner passed, than
urprising variety of objects are presented to th
eye. In the middle of a large octagonal body o
vater stands an obelisk seventy feet high; and, a
great distance, two rivers are observed, which
pproaching the octagon, unite their streams, an
ill into that spacious receptacle. On the righ
and appears a Gothic temple, dedicated to Li
erty, which crowns the summit of a hill; and o
he left, a pyramid, sixty feet high, sacred to th
emory of that great architect, Sir John Van

with something that increases that pleasure, by raising the admiration; and the pavilions, pyramids, obelisks, temples, statues, bustoes, and monuments, are all nobly finished.

At Burleigh, in Northamptonshire, the earl of Exeter has a most magnificent seat, called Burleigh House. It has the appearance rather of a town than a house: its towers and pinnacles look like those of churches, and a large spire, covered with lead, rises like that of a cathedral over the clock in the centre: there is an uninterrupted prospect from it for near thirty miles, over Stamford into the fens of Lincolnshire. In the great hall is a fine portait of one of the earls of Exeter, done in Italy; and here is so excellent a painting of Seneca bleeding to death, that it is said Louis XV. offered six thousand pistoles for it. There are also several other very fine paintings in this house, by the celebrated Verrio.

At Althrop, about four miles from Northampton, there is a noble seat, built by Robert earl of Sunderland, in the middle of a charming park. This house is particularly remarkable for a magnificent gallery, furnished with curious paintings by the best hands, and for a noble piece of water, which is a fine Venetian gondola.

Dalkeith, about five miles from Edinburgh, a noble palace, built by the duchess of Buccleugh, on the site of an old castle, which belonged to the earl of Morton, regent of Scotland during the minority of James the Sixth. This palace is one of the finest and largest modern in Scotland, is said to be the very [illegible] William's palace at Loo in Guelderland, built of stone, and stands on a rising ground on the bank of the river Northesk, from

ience it overlooks a large park, beautified with ıter-works and a canal. It consits of a front, ornea with columns of the Corinthian order, d a double wing at each end: there is a spacious art between the palace and the park, surround- with iron ballustrades between free-stone pillars. ıe grand stair-case is supported by pillars of ırble, and the steps are curiously inlaid with ılnut-tree. At the top of the stair-case is a mag- ıicent room, adorned with fine paintings by the st masters.

Newbottle, about one mile distant from Dal- ith, is a noble seat belonging to the marquis of thian; and contains one of the best collections paintings, statues, and busts in Scotland: the ıation of the house is delightful; the gardens beautifully laid out; and in the adjacent oods there are some subterraneous apartments, pposed to have been formed by the ancient ıabitants of the country, as magazines for pro- ion, or asylums in the hour of danger.

Hamilton-house, in Lanerkshire, is a magnifi- ıt edifice situated upon the bank of the Avon, in ich beautiful plain, and built of white free-stone, ıich looks like marble. The furniture of this lace is answerable to its magnificence, being rned with fine paintings by the most eminent sters. It has a romantic garden with seven ging terrace walks down to the river side; and ark seven miles in circumference, well plant- with oaks, firs, pines, &c. stocked with deer l wild cattle, peculiar to the Caledonian forests; l watered by the river Avon; and behind the den is a smaller park well planted and wa- l

Drumlanrig, in the county of Dumfries, is

noble palace belonging to the duke
berry, pleasantly situated on the side
embosomed in trees. It is a squa
free-stone, with twenty-eight turret
nues, gardens, and terrace walks, be
stone bridge over the river Nith.
gardens cut out of the rock down to t
water-works and grottos; and the
a white breed of wild cattle, deri
native race of the country.

Of the several fortresses in Grea
most remarkable is the Tower of Lon
on the east side of that city, near th
Thames. It was anciently a royal
consisted of no more than what is n
White Tower, which appears to h
marked out by William the Conq
year 1076, and completed by his
Rufus, who, in 1098, surrounded
and a broad and deep ditch. Severa
princes made additions to it, and kin
built the church. In the year 163
Tower was rebuilt; and since the
king Charles II. it has been thorou
and a great number of additional b
to it. At present, besides the W
here are the offices of ordnance, of th
keepers of the records, the jewel offic
armoury, the horse armoury, the ne
moury, barracks for the soldiers,
handsome houses; so that the Towe
has at present more the appearance
a fortress. Upon the wharf is a
sixty pieces of cannon, which are fi
holidays. On this side of the Tow
and over it is a draw-bri

ver-wall, on the same side, is a water-gate, mmonly called Traitor's Gate, because it had en customary to convey traitors and other state isoners through it by water, to and from the wer.

Parallel to the wharf, upon the walls, is a plat-m seventy yards in length, called the Ladies ne, whence there is a fine prospect of the ship-ig and the river Thames. From this line there a walk round the Tower walls, on which are ee batteries, distinguished by the names of the evil's Battery, the Stone Battery, and the ooden Battery, each of which is mounted with veral pieces of brass cannon.

The principal entrance to the Tower is by two tes, one within the other, on the west side, both ge enough to admit carriages, and parted by strong stone bridge, built over the ditch.

The principal officers of the Tower are a con-ible, a lieutenant, and a deputy-lieutenant.

Within the outer gate is the Lion Tower, in hich is a fine collection of wild beasts, consist-g of lions and lionesses, leopards, tigers, apes, kals, and other wild animals, together with a eat variety of birds: these animals are all regu-ly fed, and carefully attended.

The Mint comprehends one-third of what is lled the Tower, and contains houses for all the ficers belonging to the coinage.

In the first story of the White Tower is an ar-oury for the sea-service, containing various sorts arms curiously laid up, for above ten thousand men; and the upper stories are filled with arms d other warlike instruments, as spades, shovels, *ckaxes, and cheveaux-de-frize.*

Near the south-west angle of the White Tow

is the Spanish armoury, being the depositary of
spoils of the Spanish armada, fitted out by Philip
of Spain, to invade England in the reign of que
Elizabeth. It consisted of one hundred and thir
two ships, of which scarcely seventy returned hon
and of thirty thousand troops on board, of wh
twenty thousand were either killed, drowned,
made prisoners in England. The trophies p
served here of this memorable victory are as
low:—A Spanish battle-ax with a pistol in the h
dle and a match-lock; the Spanish general's l
bert, covered with velvet, the nails are dou
gilt, and on the top is the pope's head curiou
engraven. An engine called the Spanish morn
star, from its figure, which is that of a star.
this kind of engine there were many thousands
board, all with poisoned points, designed to str
at the English in case they ventured to board
Spanish fleet. Thumb-screws, of which th
were several chests full on board, intended to
tort a confession from the English where tl
money was hid. A Spanish poll-ax, used
ding of ships. Spanish halberts, or spe
e of which are curiously engraved, and in
gold. Spanish spadas or long swords,
d at the points. Spanish cravats, consis
gines of torture, made of iron, and put
d to lock the feet, arms, and heads toget
such as the Spaniards called English here
ilboes, being instruments also made of iron,
yoking the Eng lish prisoners two and two.
nish shot, of which there are four different
—spike-shot, star-shot, chain shot, and link-
l admirable contrived, as well for the des
n of the mas ts and rigging of ships, as for sw
the men off the decks. The banner,

ucinx on it, which was to have been carried be-
re the Spanish general. An uncommon piece of
ms, consisting of a pistol in a shield, contrived
such a manner that the pistol might be fired,
id the body covered at the same time: it is to be
ed by a match-lock, and the sight of the enemy
ken through a little grate in the shield, which is
stol-proof. The Spanish rançeur, made in dif-
rent forms, and intended either to kill the men
horseback, or to pull them off their horses; and
one of them is a piece of silver coin, which the
paniards intended to have made current in Eng-
nd. The Spanish officers lances, finely engraved
id gilt. The common soldiers pikes, eighteen
et in length, pointed with long sharp spikes, and
od with iron. The Spanish general's shield,
hich was to have been carried before him as an
sign of honour; upon which are depicted, in
ost curious workmanship, the labours of Her-
les.

Here also are deposited several Danish and
xon clubs, a sort of weapons which the Danes
id Saxons are said to have used in their conquests
f England; an instrument called king Henry
e Eighth's walking-staff, with three match-lock
istols in it, and coverings to keep the charges
ry; a large wooden cannon, called Policy, be-
ause, as is said, when king Henry VIII. be-
eged Bulloign, the roads being impassible for
eavy cannon, he caused a number of these
ooden ones to be made, and mounted on proper
atteries before the town, as if real cannon,
hich so terrified the French commandant, that
e gave up the place without firing a shot; and
e ax with which Ann Bullen, the mother of

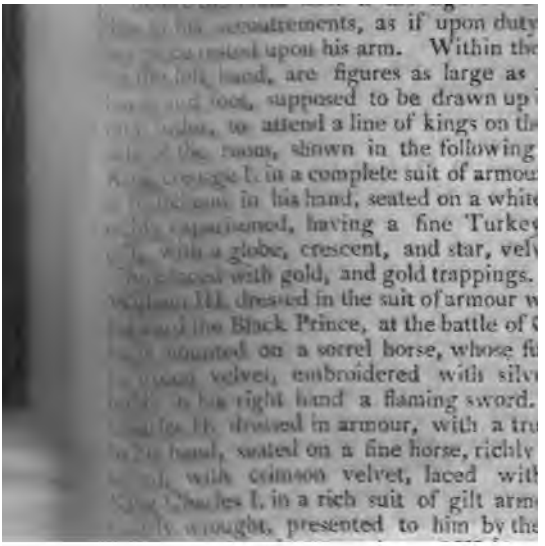
queen Elizabeth, and the earl of Essex, the favourite of queen Elizabeth, were beheaded.

The other curiosities in this place are, a train of little cannon, neatly mounted on proper carriages, being a present from the foundery of London to king Charles I. when a child, to assist him in learning the art of gunnery; weapons made with the blades of scythes, fixed strait to the ends of poles, and taken from the duke of Monmouth's party at the battle of Sedgemoor, in the reign of James II.; the partizans that were carried at the funeral of king William III.; and a model of an admirable machine, the design of which was brought from Italy, by Sir Thomas Lombe, at the hazard of his life. The latter object of attention is a mill for the manufacture of silk, and was first erected in the year 1734, by Sir Thomas, at his own expence, in an island of the river Derwent, facing the town of Derby. It works three capital engines for making orgazine, or thrown silk; has twenty-six thousand five hundred and eighty-six wheels; and ninety-seven thousand seven hundred and forty-six movements, which are all worked by one water-wheel, that turns round three times in a minute. By every turn of the water-wheel, the machine twists seventy-three thousand seven hundred and twenty-six yards of silk thread, so that in twenty-four hours it will twist three hundred and eighteen million four hundred and ninety-six thousand three hundred and twenty yards; yet any single wheel or movement may be stopped, without impeding the rest; and the whole is governed by one regulator. This machine was thought of such importance by the legislature, that, on the expiration of the patent which Sir

homas had obtained for the sole use of it during urteen years, the parliament granted him fourcen thousand pounds, as a farther recompence for e hazard he ran, and the expence he had inrred, by introducing and erecting it, on condion that he should suffer a perfect model of it to : taken, in order to secure and perpetuate the vention.

Northward of the White Tower is a noble ilding, called the Grand Store-house, extending o hundred and forty-five feet in length, and six- in breadth. It was begun by king James II. d finished by William III. who erected that ignificent room called the New or Small Arbury, to which there is a passage by a folding- or, adjoining to the east end of the Tower cha- l, which leads to a grand stair-case of easy asnt. On the left side of the uppermost landing a workshop, in which are constantly employed out fourteen furbishers, in cleaning, repairing, d arranging the arms contained in this place; nich are so artfully disposed, that at one view ay be seen arms for nearly two hundred thousand en, all bright and fit for service at a moment's rning. Of the disposition of these arms no equate idea can be formed by description; and ere are a thousand peculiarities in the disposin of so vast a variety which no description can ach.

Upon the ground-floor, under the small armoury, a large room of equal dimensions with that, supported by twenty pillars, all hung round with war- e implements. This room, which contains the yal train of artillery, is twenty-four feet high, d *is full of* the most dreadful engines of de*struction; besides* harness for horses, men's har-



in his right hand. King Henry VII. who also holds a sword, and is seated on horseback in a complete suit of armour, finely wrought, and washed with silver. King Edward V. who, with his brother Richard, was smothered in the Tower, by order of their uncle and guardian Richard III.; and having been proclaimed king, but never crowned, a crown is suspended over his head: he holds a lance in his right hand, and is dressed in a rich suit of armour. King Edward IV. in a bright suit of armour, studded, with a drawn sword in his hand. King Henry VI. Henry V. and Henry IV. King Edward III. with a venerable beard, in a suit of plain bright armour, with two crowns on his sword, alluding to his having been crowned king both of England and France. King Edward I. dressed in a very curious suit of gilt armour, and in shoes of mail, with a battle-ax in his hand. And William the Conqueror, the first in the line, though the last shown, in a suit of plain armour.

The other principal curiosities in this room are a large tilting-lance of Charles Brandon, duke of Suffolk; a complete suit of armour, made for king Henry VIII. when he was but eighteen years of age, rough from the hammer; a small suit of armour made for king Charles II. when he was about seven or eight years of age, with a piece of armour for his horse's head; real coats of mail, called Brigandine jackets, consisting of small bits of steel, so artfully quilted one over another, as to resist the point of a sword, and penetration a musket ball, and yet so flexible, that the wearer may bend his body any way, as well as in an ordinary suit of clothes; an Indian suit of

armour *, sent by the great mogul as
king Charles II.; the armour of Jol
duke of Lancaster, the son of Edw
a droll figure of one William Somers,
jester to king Henry VIII.

Over the door of the armoury, on
a target, on which are engraved t
Justice, Temperance and Fortitude; anc
the room are entirely lined with vari
armour for horses heads and breasts,
many pieces that now want a name.

About twenty yards east of the
house, or new armoury, is the Jew
dark stone room, in which the je
crown are deposited. The jewels s
time are those following:

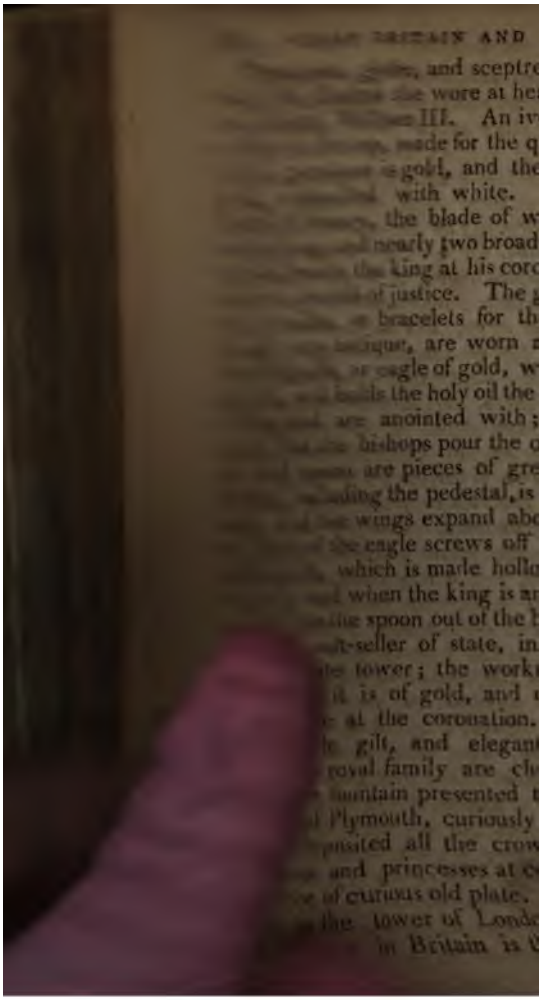
The imperial crown, with which i
ed all the kings of England have b
since Edward the Confessor, in 10
gold, enriched with diamonds, rubi
sapphires, and pearls. The cap wit
ple velvet, lined with white taffety
with three rows of ermine. The g
globe, put into the king's right hand,
crowned; and borne in the left, wit
in his right, upon his return into W
hall, and so to Westmin
Westmins

The globe is about six inches
edged with pearl, and enriched w
stones. On the top is an amethyst

* [illegible]
[illegible]
[illegible]
[

nearly an inch and a half high, set with a
ross of gold, adorned with diamonds, pearls,
ther jewels; the whole height of the ball is
n inches.

e golden sceptre, with its cross set upon a
amethyst of great value, garnished round
table-diamonds. The top rises into a fleur-
of six leaves, all enriched with precious
s; from whence issues a mound, or ball,
of the amethyst already mentioned. The
re with the dove, the emblem of peace,
ed on the top of a small Jerusalem cross,
ornamented with table-diamonds, and
s of great value. St. Edward's staff, four
even inches and a half in length, and three
s three quarters in circumference, all of
n gold, which is carried before the king at
ronation. The rich crown of state worn by
ajesty in parliament, in which is a large
ld, seven inches round, a pearl esteemed the
i n the world, and a ruby of inestimable va-
The crown belonging to the prince of
s, which is carried together with the king's
, as often as his majesty goes to the par-
nt-house, by the keeper of the jewel office,
led by the warders, to Whitehall, where
crowns are delivered to the officers appoint-
receive them, who, with some yeomen of
ard carry them to the robing rooms adjoin-
the House of Lords, where his majesty and
rince of Wales put on their robes. The
wears his crown on his head while he sits
the throne; but that of the prince is placed
him. As soon as the king is disrobed, the
s are carried back to the tower, and again
up in the jewel office.



; which is properly a citadel, for it stands and commands the city, being about a mus- ot from the High-street. When or by whom built does not appear, but it is indisputably ancient, and was erected before the city, may therefore be supposed to have been either to protect, or be protected by the

tands on a rock between two lofty hills, the south, known by the name of Salisbury , and the other on the north, called Caulton , which, at a distance, have the appearance wings, whence probably was derived the Castrum Alatum, or the Winged Castle, by this was known to the ancients. That part sbury Craig directly south of the castle is a rock, called Arthur's Seat, or Chair, from itish hero king Arthur. Edinburgh Castle cessible on every side except that next the where also the rock on which it stands is ely high, and where the entrance is de- l by a round battery, half moons, ramparts, outwork, all well mounted with cannon, s a wide trench, over which is a draw- . In this castle is an uniform stately struc- hewn stone, with very magnificent apart- one of which king James I. of Great vas born. This is the residence of the of the castle; and here the regalia of the ngdom of Scotland, and chief records of said to have been kept upwards of two years, as well as the national magazine and ammunition. It is furnished with a r the use of the garrison; supplied with om two wells; and commands a most de- nd extensive prospect.

prospect from Stirling Castle is
ful, and the park is tolerably ex-

Castle is reckoned one of the keys to
Dunbarton Castle is accounted
, though small in circumference,
ion of some persons, the strong-
, both by nature and art. It stands
the river Clyde, upon a two headed
p on all sides, except towards
one of these heads is a high watch
on the other, which is somewhat
strong turrets.
tle there is but one ascent, which
row steps cut out of the rock, and
by one person at a time. A river
Leven, on the west, and the river
south, serve it for ditches; and to
morass, which is every tide under
Camden, in his description of this
, that when any part of the rock is
sulphureous smell, and that one
of loadstone.
which is fifty-three miles from
k at the distance of half a mile
of Dunbarton, a royal borough,
ived its name, and which was
Dunbritton, or the Britons town,
een defended against the Scots,
, for three hundred years. Bede,
tes, that in his time it was the
y the Britons had; and Roger
, that in the year 756, having
by Eadbert, king of Northum-
ng, king of the Picts, it was
nity to surrender upon capitula-

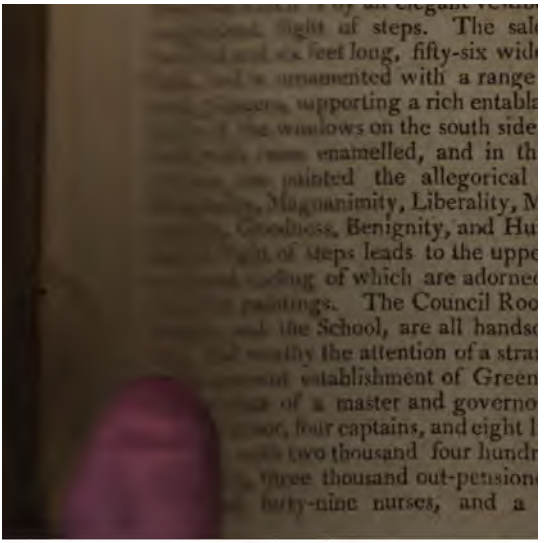
each part, between the ranges of Corinthian columns, is the door, which is of the Doric order, and adorned above with a tablet and pediment. Within the height of these lofty columns are two series of windows, enlightening two floors: the undermost, which are the smallest, have rustic cases, crowned with pediments; while the upper series, which are larger and more lofty, are adorned with the orders, and with upright pointed pediments.

Over these is an attic story; the entablature of the Corinthian columns and pilasters supports a regular attic course; the pilasters of this order rising over every column and pilaster of the Corinthian below, between which the windows are regularly disposed, and the top is crowned with a handsome ballustrade.

The buildings, which are continued from these, and face the area, correspond with them, though in a finer and more elegant manner. In the centre of both is a range of columns supporting a pediment, and at each corner a range of Corinthian

The front is rusticated, and there are
f windows.

el is a beautiful edifice, one hundred
eet long, fifty-two feet broad, and ca-
ommodating upwards of a thousand
e entrance is by a vestibule, orna-
four statues, and leading to an ele-
steps. The organ gallery is sup-
x fluted marble columns, crowned
lature and ballustrade; the walls are
th two ranges of pilasters; and the
g is enriched with foliage, &c. in
tyle: the communion table is a slab
rble, supported by cherubims, and



the Thames, about a mile above the western
tremity of London, for the invalids in the land
:vice, called Chelsea Hospital, and sometimes
ıelsea College. This hospital was originally a
llege, founded by Dr. Sutkliff, dean of Exeter,
the reign of James I. for the study of Polemic
vinity, and was endowed, in order to support a
ovost and fellows, for the instruction of youth
that branch of learning.

The king, who laid the first stone of the build-
g, gave many of the materials, and promoted
e work by a large sum of money; and the
ergy were also very liberal on the same oc-
sion: but the sum settled upon the foundation
ing far unequal to the end proposed, the rest
as left to private contributions; and these com-
g in slowly, the work was suspended, and soon
ll to ruin. At length, the ground on which the
d college was erected coming to the crown,
harles II. began to erect the present hospital,
hich was completed by William and Mary. It
as built from a design by Sir Christopher
Ven, and is confessedly one of the best founda-
of the kind in the world.

rincipal building consists of a large qua-
open to the Thames. The front, in the

maimed officers of cavalry and infantry,
infirmary for the sick, with other conve
This building is particularly remarka
great regularity, and proper subord
parts, together with such a disposition
as is best suited to the purposes of the e
reception of a great number, and the
them with every thing that can contribu
convenience and pleasure. The expen
ing the edifice is computed at one hu
fifty thousand pounds, and the exte
ground is above forty acres.
The number of ordinary pensioners i
pital is about five hundred, but the ext
or out-pensioners, are upwards of two
sand; and are allowed each twelve p
These great expences are sup
deducted out of the pay of
y's pay once a year from e
n soldier; and when there
is supplied by a grant fr

ounded in the reign of king James VI. of Scotnd, by Mr. George Herriott, a goldsmith, for aintaining and educating one hundred and thirty oor boys, the children of decayed merchants and adesmen of the city, of whom some are sent to ie university, with an exhibition of seven pounds year, and the rest are apprenticed, and have irteen pounds ten shillings given with them to master.

This hospital consists of an exact square, built f free stone, with a piazza on the inside all ound. Over the gate is a high tower, containg a clock and bells; and at each corner of the uilding is a square tower, with little turrets, coered with lead. In a nich over the gate is a atue of the founder. Here also are a flower garen, a kitchen garden and an orchard, which are ept in good order.

One of the most famous buildings in London the Royal Exchange, which is the meeting lace of the merchants of that great metropolis, nd is the finest and strongest fabric of the kind Europe. This edifice was originally built of rick, in the year 1567, at the expence of Sir Thomas Gresham; and, in 1570, was pro-imed the Royal Exchange, with sound of pet, at the command, and in the presence, ieen Elizabeth. That structure being de-d by the fire of London, in 1666, it was t of Portland stone, and rustic work, in a more magnificent manner, as it now stands, expence of eighty thousand pounds. Of uilding king Charles II. laid the first stone, year 1667, and it was finished in 1669. The is a parallelogram two hundred and three n length, and one hundred and seventy-one

both under the pediment, and on each
basement story is very massy, and buil
having in the centre the door whic
the kitchen, cellars, and other office
each side a flight of steps, of very
able extent, leading up to the port
middle of which is the door, which op
apartments and offices, where busines
acted. The stone ballustrade of the st
tinued along the front of the portico, a
lumns support a very large, angular
adorned with a noble piece in bass reli
Taylor, representing the dignity and
the city of London. In the centre stan
ful woman crowned with turrets, repre
city, her left foot placed upon the figu
who lies on her back, and seems ende
rise. In her right hand she holds a wa
left arm rests upon a large shield, which
arms. This being the principal figure,
in alto relievo :—she seems ready to st
her head and right arm, which ar
formed, project from the back groun
wood extends beyond the cornice of the
To her, on her right side, stands a C
ing the Cap of Liberty over his shoul
short staff, in the manner
er, a river god, repres

blems of commerce. Beneath this portico are two series of windows, and above them an attic story, with square windows, crowned with a balustrade.

The building is an oblong, and the apartments are extremely noble; but being too closely surrounded with houses, the rooms are dark, and even the front cannot be viewed to proper advantage.

The Bank of England is a magnificent stone edifice situated a little to the north of Cornhill. The front is composed of a centre, of the Ionic order, on a rustic base; and two wings, each ornamented with a beautiful colonnade. The back is a huge wall, singularly opposed to the front, by its massive and heavy style.

The principal entrance is in Threadneedle-street, and leads through a very handsome court to the hall, which is seventy-nine feet by forty, and exhibits a very noble appearance.

To the east of the first court is a passage leading to the rotunda, a spacious apartment appropriated to stock-brokers, and others, who transact business respecting the funds. The top of this apartment forms a noble dome, and the light is admitted at the centre, through a cupola, supported by twelve female figures, which represent the months of the year.

The other public entrance is from Bartholomew-lane, by a passage, on each side of which are large and elegant offices, for the management of the respective funds. Beneath the interior of this edifice are strong vaults, for depositing money, unwrought gold and silver, and other valuables.

The direction of this national establishment is vested in a governor, a deputy-governor, and

of the apartments.

Guildhall, at the northern extremity of street, Cheapside, is a fine Gothic build which are held the various courts of the cit in which most of the grand city entertai are given.

The hall is a very noble room; being dred and fifty-three feet long, forty-eight and fifty-five high. The walls, on the n and southern sides, are adorned with Gothi pillars, painted white, and veined with blu re are some good portraits, together wi ues, respectively erected to the mem Beckford, lord mayor of London, a Chatham.

e balcony, opposite to the great door, by four iron pillars, in the form of and on each side is an enormous figur g a long staff with a ball stuck with ng at the end of it; and the other grasp

ich was erected to perpetuate the me-
the fire of London, which broke out
place where it stands, was begun, ac-
o a design of Sir Christopher Wren, in
l finished in 1677. It is fifteen feet in
and two hundred and two feet high from
l: it stands upon a pedestal forty feet high,
y-one feet square. On the cap of the pe-
four dragons, the supporters of the city
d between them trophies with symbols of
arts, sciences, and commerce.

it is a spiral stair-case of black marble,
three hundred and forty-five steps, with
eading to a balcony, which encompasses
hirty-two feet high, and supporting a
rn of brass gilt. It is observed of this
hat, like the emperor Trajan's pillar at
is built in form of a candle.

est side of the pedestal is adorned with
by Cibber, of which the eleven principal
e in alto, and the rest in basso relievo.
e to which the eye is particularly directed
ıle, representing the city of London, sit-
languishing posture on a heap of ruins.
er is Time gradually raising her up; at
woman, representing Providence, gently
er with one hand, while, with a winged
the other, she directs her to regard two
in the clouds, one with a cornucopia,
plenty, the other with a palm branch,
m of peace. At her feet is a bee-hive,
that, by industry and application, the
misfortunes may be overcome. Behind
citizens, exulting at his endeavours to
er; and beneath, in the middle of the
a dragon, the supporter of the city arms,
avours to preserve them with his paw

Still further, at the north end, is a vie
city in flames, with the consternation of t
bitants. On the other side, on an
pavement, stands king Charles II. in a
habit, who, approaching the figure repr
the city, appears to command three of hi
ants to descend to her relief: the first re
the Sciences, the second Architecture,
third Liberty. Behind the king stands hi
the duke of York, with a garland in one
crown the rising city, and a sword in th
for her defence: behind him are Justice
titude; in the pavement, under the so
feet, appears Envy peeping from her
gnawing a heart; and, in the upper pa
back ground, the re-construction of the c
presented by scaffolds, erected by the
unfinished houses, with builders and lab
work upon them.

The other sides of the pedestal have
Latin inscription:—that on the north side
count of the rise, progress, and amazing
tion of the fire of London; the inscriptio
south side specifies the prudent and
measures taken by the king and parlia
restoring the city, with greater beauty,
firmness, and convenience, and for pr
similar misfortunes for the future; the in
on the east side contains the names of t
Mayors from the time it was begun til
finished; and round the upper part of the
is the following inscription in English:

'This pillar was set up in perpetual
brance of the most dreadful burning of
testant city, begun and carried on by
chery and malice of the popish faction

ginning of September, in the year of our Lord
56, in order to their carrying on their horrid
ıt, for extirpating the Protestant religion,
d old English liberty, and introducing Popery
d slavery.'

his inscription, upon the duke of York's ac-
on to the crown, was erased: but soon after
evolution, it was restored again.

has been observed of this monument, that it
ıdoubtedly the noblest modern column in the
d; and that, in some respects, it may vie with
e celebrated ones of antiquity, which are con-
ıted to the names of Trajan and Antoninus.

a little distance from the monument is the
ent stone bridge over the Thames to the bo-
h of Southwark, known by the name of Lon-
Bridge, and formerly remarkable for the lofty
es and shops built on each side of it, which
it so much the appearance of a street, that a
ıger scarcely knew he was crossing the river,
he discovered it by two openings near the
lle; it was erected in the room of a wooden
ge, and finished in the reign of king John,
ng been thirty-three years in building, at the
ic expence. It consisted of twenty arches, and
nine hundred and fifteen feet long, forty-four
high, and seventy-three wide; but the
t between the houses was only twenty-three
wide. The narrowness of this passage having
sioned the loss of many lives, from the num-
of carriages passing and repassing; likewise
normous size of the sterlings, which took up one
h part of the water way, and rendered the fall
w water no less than five feet, having also oc-
med frequent and fatal accidents, the city of
lon, in 1756, obtained an act of parliament

adorned by stone balustrades, enlightene
light with lamps. The passage throu
bridge is also enlarged, by throwing two
arches into one, and by other improv
yet London Bridge is still deemed so uns
situation, that it is intended to take it do
to erect an iron bridge in its stead.

The water-works on the north-west sid
bridge supply a considerable part of Lond
water, for domestic purposes; but as they
low, the water requires to be thrown u
top of a bason, one hundred and twenty
height, whence it again descends into th
pipes, and is conveyed through the tow
directions.

Westminster Bridge is universally all
be one of the finest in the world. The fi
of this noble structure was laid on th
of January, 1738, by the earl of Pe
and was finished and opened on the 17th

This magnificent structure is one thousand two ındred and twenty-three feet in length, and rty-four in breadth. The space allowed for ıssengers consists of a commodious foot-way ; ven feet broad on each side, paved with broad oor-stone, and the intermediate road is suffient to admit the passage of three carriages and vo horses a-breast. The bridge consists of thir-en large and two small arches, with fourteen in-rmediate piers. The arches are all semicircular, ıd spring from about two feet above low-water ıark ; the centre arch is seventy-six feet wide, ıd the rest decrease in width equally on each de, by four feet ; and the free course for the ater under the arches is 870 feet, so that there no sensible fall of water. The foundation laid on a firm and solid mass of gravel, which es at the bottom of the bed of the river, but at much greater depth on the Surry, than on the Vestminster side ; and this inequality of the round required the length of the several piers) be very different, as some have their foundaons laid at five, and others at fourteen feet under ıe bed of the river. The piers are all four feet vider at their foundations than at the top, and re founded on the bottoms of the wooden cases ı which they were built. All the piers consist f solid blocks of Portland stone, many of which ré four or five tons weight, and none less than a on, except the closers, or smaller stones intended or fastening the rest, one of which is placed beween every four of the larger blocks.

Black Friars Bridge, though less magnificent han the former, has the advantage of much wider ırches, and a lighter structure. The first stone f the north abutment was laid on the 31st No-

with a Latin inscription. The arches
bridge, which are only nine in num
elliptical, and the centre arch a hund
wide, those on the sides decreasing i
in a regular gradation, and the arch
abutment at each end is seventy feet w
has an open ballustrade at the top, and a
dious foot-way on each side, with room
carriages a-breast in the middle. The
arch is exceeded by very few in the
and is considerably larger than that
Rialto at Venice. This bridge measu
thousand one hundred feet in length, ar
two in breadth, and the expence of its er
said to have amounted to one hundred
two thousand eight hundred and forty po

The British museum merits particular a
not only as the noblest cabinet of curiositi
world, but as a large, beautiful, and ma
building. This edifice was erected in 1677,
called Montague House, from having been
residence of the dukes of Montague. In
1753, the British Parliament having passe
for purchasing the museum of Sir Hans Slo
the collection of manuscripts of the late
ford, called the Harleian library, for the u
public, twenty-six trustees were appointe
corporated, to provide a repository for t
some other collections, which repository

called the British Museum. These persons elected fifteen other trustees, and having bought Montague House, fitted it up for the reception of these collections. They also appointed proper officers to superintend the Museum, and ordained certain statutes with respect to the collection contained in it.

The collection of Sir Hans Sloane consists of a great variety of natural and artificial curiosities, valuable remains of antiquity, and a large library, which together cost the proprietor fifty thousand pounds. It was purchased by parliament for twenty thousand pounds; ten thousand pounds were paid for lord Oxford's manuscripts; ten thousand more were laid out for the purchase of Montague House; fifteen thousand were spent in repairs, alterations, and conveniences; and thirty thousand pounds were vested in the public funds, for supplying salaries for officers and other necessary expences. His late majesty added to this museum the royal library of books and manuscripts collected by the several kings of England; and Major Edwards left it a fine collection of books, together with seven thousand pounds in reversion for purchasing manuscripts, books, medals, and other curiosities.

The British museum, which has a garden of nearly eight acres behind it, is now in every part so excellently contrived for holding this noble collection, and the disposition of it in the several rooms, is so orderly and well designed, that the whole may be justly esteemed an honour and ornament to this island.

But to give the reader a proper idea of this justly celebrated place, it may be necessary to take a general view of the whole building, with the

a large piece of the curious marble called
from its resemblance to a serpent's skin
piece of the lava, which, in the eruptions o
Vesuvius, issues from it in form of a burning
several ancient stone monuments, with
tions in Latin, Greek, and other langu
fine skeleton of a fish called the Unicorn;
of a very particular kind of Buffalo, and
other curiosities.

From the hall the ascent is by a ma
stair-case, painted by La Fosse. The s
the cieling is Phaeton, requesting Apoll
mit him to drive his chariot for a day.
inside walls is a landscape by Rousseau
cieling of the vestibule represents th
Phaeton, and in this is a mummy, and so
antiquities. The saloon is a most ma
room, the side walls of which are painte
Fosse; and adorned with landscapes by R
and flowers by the celebrated Baptist.

tiguous to this is the room of medals, which ar in number upwards of twenty-two thousand; the turning a third time to the right, the next roon contains Sir Hans Sloane's manuscripts; and ad joining to the manuscript room is another whicl contains the antiquities, and opens into the ves tibule.

Passing again through the vestibule into the sa loon, the visitor is conducted into a room, whicl contains curious minerals: the next contains a col lection of shells, and the third a collection of ve getables and insects: then turning again to th left, the next room contains animals in spirits and contiguous to that is a room containing artifi cial curiosities.

Now descending a small stair-case, and pas sing through a room, in which is a magneti apparatus given by Dr. Knight, the spectator i conducted through two rooms, which contain th royal libraries; afterwards through four rooms containing the library of Sir Hans Sloane, con sisting of no less than forty thousand volumes and from thence into a withdrawing room for th trustees; then into the room which contain major Edwards' library, consisting of about thre thousand volumes; and lastly, into a room tha contains a part of the king's library, which in th whole consists of about twelve thousand volume

In the College of Physicians at Edinburgh, is noble museum, called Musæum Balfourianum from its founder, Sir Andrew Balfour, an eminen physician of this city. It contains a fine collec tion of natural and artificial curiosities, of whicl Sir Robert Sibbald, who very much augmented i published an account in the year 1697.

The most remarkable building in Edinbur

a large court, commonly called the Parliament Close, from the Parliament-house, which forms a part of the court, and in which the parliament of the ancient kingdom of Scotland usually assembled, before the union of England and Scotland, in the year 1707. The Parliament-house, which was erected by king Charles I. in 1636, is a stately and convenient structure, of free stone. Over the entrance are the arms of Scotland, supported by two figures, representing Mercy and Truth, with the inscription STANT HIS FŒLICIA REGNA; and under the arms, UNIO UNIONUM, referring to the union of the two crowns. The room where the parliament met is a curious piece of workmanship. Here is held the court of session, which is the supreme civil judicature in Scotland; the justiciary or criminal court; and the sheriff and commissary courts. In the middle of the room is a throne for the king's commissioner, with benches on each side for the nobility and bishops, one above another, so that the highest is level with the throne, and the lowest with the pit, where are forms in the middle for the commoners. Without the area, and opposite to the throne, is a pulpit, from which the parliament, upon particular occasions, heard divine service. Behind is a large partition where strangers might attend the debates.

Under the Parliament-house is the Post-office, and a library, consisting of a noble collection of books and manuscripts, belonging to the faculty of advocates; in which is also an excellent collection of ancient coins, particularly old English and Scotch coins. Adjoining to the advocates library is the register of all the deeds and securities of the nation.

Among other stately buildings in the Parliament Close is a fine room for the meeting of the royal boroughs of Scotland, adorned with excellent paintings. Here also is a house which mounts seven stories above the area of the court; and being built on the edge of a precipice, the back part is so much below the court, that, from the bottom to the top, the stair-case ascends fourteen stories.

In the middle of the Parliament Close is a curious equestrian statue of king Charles II. in brass, erected on a stately pedestal, at the charge of the city: this figure is so exceedingly well proportioned, that it is reckoned the finest of the kind in Europe.

Near the royal hospital at Chelsea are Ranelagh House and Gardens, so called from having been formerly the seat of the earl of Ranelagh. This is now a place of public entertainment; and, in the garden is a rotunda, the external diameter of which is one hundred and eighty-five feet: round the whole is an arcade, and over that a gallery, with a ballustrade, except where the entrances into the house, which are four, break the continuity. Over this are the windows; and it terminates with the roof. One of the entrances is filled by an orchestra, which was originally placed in the middle of the area, where there is now a chimney, with four faces, in which is a fire, whenever the weather makes it necessary. The entertainments consist of a band of music, accompanied with the best voices; and the place is frequented by persons of the first distinction.

At Vauxhall, a village near London, on the Surry side of the Thames, there are some spacious gardens, which have been for many year

converted into a place of genteel entertainment during two or three months in the summer season. In the middle of the garden is a magnificent orchestra, with a fine band of music, and some capital voices. Round the orchestra are boxes, disposed to the best advantage for hearing the music. Here is a rotunda and ball-room, finely illuminated, in which is an orchestra, with an organ, where, on rainy evenings, the company may be safely sheltered and entertained. In this room are some good historical paintings by Hayman; and in the grand pavilion are several pieces by the same master, from the historical plays of Shakespeare, which are greatly admired for the design, colouring, and expression. In this garden are several noble vistas of very tall trees, where the spaces between each are filled up with neat hedges, and on the inside are planted flowers, and odoriferous shrubs. Some of these vistas terminate in a view of ruins, and others in a prospect of the adjacent country; and some are adorned with the painted representation of triumphal arches. Here also are several statues, and in particular one, by Rubiliac, of Mr. Handel, playing on a lyre in the character of Orpheus.

These delightful gardens are illuminated every night, during the season of performance, with a prodigious quantity of coloured lamps and transparent paintings, which produce a very fine effect [illegible] entering. At ten o'clock a bell announces the opening of a cascade, and some truly beautiful scenery, which is calculated to excite universal admiration. Suppers and other refreshments are provided with the utmost elegance and attention; and fireworks are occasionally introduced, to heighten the attractions of the place.

CANALS, &c.

THE duke of Bridgewater's magnificent work near Manchester is, perhaps, the greatest artificial curiosity of this kind in the world. This is a subterranean canal, constructed to convey coals out of a mine, to Manchester and other places, and capable of being applied to many other considerable purposes. It begins at a place called Worsly Mill, about seven miles from Manchester, where, at the foot of a large mountain is a bason, that forms a great body of water, which serves as a reservoir, or head, to this navigation; and in order to draw the coals out of the mine, which runs through the hill to an amazing extent, a subterraneous passage is formed, large enough for long flat-bottomed boats to go up to the mines. This passage also serves to drain the coal-pits of that water which would otherwise obstruct the work, and is carried on under ground to a considerable extent.

Having obtained a ticket to see this curiosity, you enter with lighted candles the subterraneous passage, in a boat made for bringing out the coals. This boat is fifty feet long, four and a half broad, two feet three inches deep, and each end terminates in a point. Through this passage you proceed, towing the boat on each hand by a rail, to the extent of a thousand yards, which is nearly three quarters of a mile, before you come to the coal-works. The passage then divides, one branch continuing in a straight line three hundred yards further, among the coal-works, while another turns off, and proceeds three hundred ya

to the left; and each of them may be extended farther, or other passages be opened from them to any other part, as the mines may run, and necessity require. Hence those who go up both passages, travel nearly three miles under ground, before they return. The passages in those parts where there were coals or loose earth, are arched over with brick, and in others the arches are cut out of the rock. At certain distances there are niches on the side of the arch, with funnels or openings through the rock, to the top of the hill which is in some places thirty-seven yards perpendicular, in order to preserve a free circulation of fresh air, as well as to prevent noxious damps and exhalations, and to let down men to work, in case any accident should happen to the passage. Near the entrance of the passage, and farther on, there are gates to close up the arch, and prevent the admission of too much air, in windy and tempestuous weather.

The arch is at the entrance about six feet wide, and about five feet high, from the surface of the water; but on entering farther it grows wider; so that in some places, boats that are going to and fro, can easily pass each other; and among the pits, the arch is ten feet wide.

Coals are brought from the pits to this passage, in low waggons, that hold nearly a ton each; and as the work is on the descent, they are easily pushed forward, on a railed way, to a stage over the canal, and then shot into one of the boats, each of which holds about eight tons. One of these boats, thus loaded, is conveyed through the passage, by a single man, to the bason at its mouth, where five or six boats being linked together, are drawn by one horse, or two mules

y the side of the canal, to Manchester, or other
laces.

There are also on the canal a considerable
umber of broad boats that hold about fifty tons,
vhich are likewise drawn by one horse; besides
bout fifty of the narrow ones.

It is necessary to take some notice of an over-
hot mill, near the mouth of the passage, which is
o well contrived as to work, by the force of the
urrent, three pair of grinding-stones for corn, a
ressing or bolting mill, and a machine for sifting
and, and compounding mortar for the buildings.
he mortar is made of a large stone, which is
laced horizontally, and turned by a cog-wheel
nderneath it, and this stone, on which the mortar
laid, turns in its course two other stones that
re placed upon it obliquely, and by their weight
nd friction work the mortar underneath, which
tempered and taken off by a man employed for
hat purpose. The bolting-mill is made of wire,
f different degrees of fineness, and at the same
ime discharges the finest flour, the middling sort,
nd the coarse flour, as well as the pollard and
he bran, without turning round; the work being
ffected by brushes of hog's bristles within the wire.

the duke has, in many places, bui
it, and where the earth was raised
level, arches under it; all of w
chiefly of stone, and are both el
rable: but what principally strike
observer, is a work raised near Ba
convey the canal over the Mersey,
river, that runs from Manchester
This is done by means of three st
spacious and lofty as to admit a
through them; and it is indeed a no
large vessels in full sail under this a
the duke's vessels sailing at the s
all, and nearly fifty feet above the n
At convenient distances there are
of the canal, receptacles for the supe
and at the bottom of the canal,
structed on very simple principles,
proper distances, to stop and prese
in case any part of the bank sho
break down.

A branch of this celebrated cana
part of Cheshire, entering it to th
ton, and leaving it at Runcorn G
flows into the Mersey. This cut w
his grace, and that justly-celebra
Mr. Brindley. Prior to the executi
nal, the river navigation from Man
carriage was twelve shillings per t
canal conveyance it is only six shil
and independent of this advantage
a species of boats have been constr
engers, by which means a cheap
course has been opened betwe
Chester, and several intervening

ARTS, MANUFACTURES, AND FISHERIES.

THE Woollen Manufacture, which includes all the sorts of commodities into which wool is wrought, now makes the principal article both in our foreign and domestic trade, and therefore deservedly claims our first consideration. The wools of England have always been in the highest repute, the best of which are those of Leominster, Cotswold, Lincolnshire, and the Isle of Wight; and though the Scotch and Irish wools are commonly sold abroad for English, yet they are very inferior in respect of fineness.

The excellence and plenty of our wool is owing, in some measure, to the sweet short grass in many of our pastures and downs; and the advantage of our sheep feeding on this grass all the year, without being shut up in folds during the winter, or to secure them from wolves at other times, contributes not a little to the softness of their fleeces. M. Colbert, to whom the French manufactures and commerce are very much indebted, had thoughts of procuring some English sheep, and propagating them in France, by choosing them, as nearly as possible, such pastures and such a sky as they had in their own island; so that the French might be no longer obliged to depend precariously on the clandestine supplies of wool from England: but the count de Cominges, then ambassador of France at the English court, laid the impossibility of getting such an export of sheep, and of making them multiply in France, so strongly before him, that he abandoned the design.

Anciently the principal commerce of this
consisted in wool unmanufactured, which
bought of us by foreigners; insomuch tha
customs of English wool exported, in the re
Edward III. amounted, at fifty shillings a
to two hundred and fifty thousand pounds p
num, which in those days was a prodigious
When our wool was sold in the fleece, our
customers were the Flemings and Braba
particularly the merchants of Ghent and Lo
who took off vast quantities, to supply two
factories that had flourished in those cities
the tenth century, and furnished the gr
part of Europe with woollen cloths, &c.
the inhabitants of Ghent having frequent
volted against their sovereigns, on account
tain taxes which they refused to pay, the sec
were at length punished and dispersed, p
them retiring to Holland, and the rest to Lo
These last, together with their art, carryin
them their spirit of sedition, it was not lo
fore several of them were obliged to flee int
land, where they instructed the natives h
manufacture their own wool; in which the
ceeded so well, and were so sensible of ti
vantages arising from it, that the British
ments have, since that time, used their utm
deavour to prevent the exportation of
though all the laws hitherto made for that p
have not put an effectual stop to that pern
practice. This establishment of the woolle
nufactures in England was about the year
though M. de. Thou places it in the reign of
Elizabeth, when the troubles respecting re
and the severity of the duke of Alva, drove
numbers of weavers and other artists out

Low Countries into this kingdom. But what that his torian says upon this head, is rather to be under stood of their perfection than their first establish ment, and of the several great manufactures the set up at Norwich, Colchester, and other places for history makes mention of those of London long before any part of the Netherlands had attempted to throw off the Spanish yoke. How valuabl the woollen manufacture is to this nation appear from a computation of Dr. Davenant, who rec kons the produce thereof to be eight millions pe annum, three fourths of which are consumed a home, and the rest exported.

As to the art of weaving, which is now brough to such great perfection amongst us, in all its va rious branches, it is undoubtedly very ancient The looms used by weavers are of various struc tures, accommodated to the different materials t be wove, and to the different manner of weav ing them. As many of them are exceedingly com plex, it is scarcely possible to give the reade a just idea of them by a verbal description, whicl therefore we shall not attempt. But perhap there is no kind of loom of a more curious struc ture than that for weaving stockings, which is modern invention, the honour whereof has beer greatly contested between the French and Eng lish. It appears, however, that this useful anc surprising machine was first invented by a French man, who, finding some difficulty to procure a exclusive privilege to settle himself at Paris, cam over to England, where he was encouraged ac cording to his merit. Having imparted his in vention to the English, they became so jealous it was forbid, under pain of death, to e of the machines out of the island, or to c

municate a model of them to foreigne
as we first received it from a Frenchm
Frenchman first carried it abroad, and b
derful strength of memory and imaginatio
a loom at Paris, on the idea he had fo
viewing it in England. This loom was
in the year 1656, and has served for th
of all those since erected in France, Holl
other parts of Europe.

As the English have long been famous
skill in navigation, as well as for thei
power, it seems proper to say something u
subject. The invention of ships is very
and at the same time very uncertain; s
cribing it to Dædalus, whose wings (s
which he invented to escape from the l
of Crete, were nothing but sails which
ded to his vessel, and thereby eluded the
of Minos. Others choose to refer the orig
useful an invention to God himself, wh
the first specimen thereof in the ark
Noah under his direction. History, howe
presents the Tyrians as the first navigator
being furnished from Lebanon and other
mountains with excellent wood for ship-b
soon became masters of a numerous fl
which they arrived to an incredible pitch o
and riches; and it is from the same sourc
that of navigation and commerce that Engl
gives her opulence and strength, and is
the envy of her neighbours on the conti
To give the reader an idea of the sever
and members of a ship, both internal and e
would be impossible without draughts and
nations annexed; but he may form a n
surprising bulk of some of these

ructures, by the dimensions of one of the largest
iat the modern ages have produced; I mean one
four first-rate men of war, which is two hundred
id ten feet in length, draws two and twenty feet
'ater, carries one hundred and ten guns and
ne thousand two hundred and fifty men, has an
ichor weighing above four tons, a cable two
indred yards long and twenty-two inches in
iameter. We read of some ships built by the
icients, whose magnitude far exceeded the largest
f the present times. That of Ptolemy Philopater
'as two hundred and eighty cubits long, thirty-
ight broad, and forty-eight high; carrying four
indred rowers, the same number of sailors, and
iree thousand soldiers. But that which Hiero
iilt, under the direction of Archimedes, was still
iore stupendous, having wood enough in it to
iake fifty gallies; together with a variety of
partments, galleries, gardens, baths, fish-ponds,
ills, stables, &c. It was encompassed with an
on rampart, and had eight towers with walls
id bulwarks furnished with machines of war,
articularly one that threw a stone of three hun-
red weight, or a dart twelve cubits long, to the
istance of half a mile.

The art of navigation was not brought to per-

pended in such a manner as to keep
horizontal. The needle is made of a
steel, in the form of a lozenge (or wha
called a diamond), and being rubbed
loadstone, acquires the above-mention
of turning towards the north; the u
which in navigation is too obvious to re
nation.

The attractive power of the magn
stone was known to the ancients, and i
by Plato, Aristotle, and Pliny; but
ledge of its directive power, by whic
its poles along the meridian of every
causes needles, pieces of iron, &c. t
it to point nearly north and south, i
later date; though the exact ti
discovery, and the person that mad
unknown. Guyot de Provins, an
poet, who lived in the twelfth cen
plainly to hint at the use of the magne

which contains the needle. Some will have it that Marco Paolo, a Venetian, having made a journey to China, brought back the invention with him in the year 1260; and what seems to confirm the conjecture is, that at first the European used the compass in the same manner as the Chinese still do, i. e. they let it float on a piece of cork, instead of suspending it on a pivot. There is some reason to think that our countryman, Roger Bacon, either discovered, or at least was acquainted with the directive quality of the loadstone; but Flavio Gioia is the person who is generally supposed to have constructed the first mariner's compass, about the year 1300, at Melfi, in the kingdom of Naples.

The variation or declination of the magnetic needle from the true north point, either toward the east or west, which is greater or less in different parts of the world, was first discovered in the year 1500, by Sebastian Cabot, a Venetian. The inclination or dipping of the needle, when hung so as to play vertically, to a point beneath the horizon, was the discovery of Mr. Robert Norman, an Englishman, about the year 1576. The variation, or the difference in the declination of the needle at different times in the same place, was first found out by our countryman Mr. Gellibrand, about the year 1634, though some ascribe the discovery to Gassendus. It is very difficult to account for these surprising phænomena; but those who are desirous of farther satisfaction with respect to the variations of the needle, we refer to the ingenious hypothesis of the learned Dr. Halley, published in the Philosophical *Transactions*.

Before we take leave of the i
tain, it may be proper to give
its principal fisheries, which m
branch of commerce. A great
and seamen are employed the
what is consumed at home, ab
thousand pounds sterling is an
time of peace, merely for her
ported to Spain, Italy, and se
Mediterranean. Notwithstand
justly reproached with being
profitable article of trade, and
bours reap the advantage of the
nature seems to invite us to rec
Hamburghers, and others,
swarms to our coasts, where
quantities of fish, and even sel
wards for ready money. Scotl
bly by this neglect; for no cou
rival it in the abundance of fi
its seas and rivers are stored
islands, especially those on the
very commodiously for carryi
trade to perfection.

The herring fishery, on the
if pursued with that application
le of vast advantage to Great
of Shetland are particularly
innumerable shoals of herrings
the summer season, insomuch t
thither annually two thousand
ons more, which are employ
ing the months of June,
hese vessels are a kind of b
from forty-five to sixty tons, e
small cannons. During this

nrich themselves by selling several sorts of Scotch manufactures to the Dutch seamen, as well as rovisions; and also by taking great quantities of sh on their own account, which are purchased by he Dutch.

The Hollanders first began a regular herring-ishery about the year 1164, and observed the se-eral seasons of their passage; for these fish make yearly progress in vast multitudes from the North ea down the British Channel, and return again t a certain time, observing a wonderful policy nd exactness. They usually go in shoals, and re fond of following fire or light; and in their assage resemble a kind of lightning themselves. ut though the Dutch began their herring-fishery o early, the method of salting and barrelling was not discovered till the latter end of the ourteenth or beginning of the fifteenth century. The white or pickled herrings cured by the Dutch re in great repute, and next to them the Irish, particularly those of Dublin, which are scarcely inferior to the best herrings of Enchuysen or Rotterdam. The Scotch herrings are not so well gutted, salted, or barrelled, as the Dutch, and yet their flavor is excellent: nor is it doubted, but if the Scotch were as careful in these circumstances as their neighbours, their herrings would be the best in the world.

For red herrings the town of Great Yarmouth in Norfolk, has long been famous *, and has en-

* This town is bound by its charter to send to the sheriffs of Norwich every year a hundred herrings baked in twenty-four pasties, which are to be delivered to the lord of the manor of East Carlton, in the same county, who is to give a receipt for them, and convey them to the king.

grossed the whole herring-fishery
coast of England. The season for
in September; and it is said that
barrels, containing no less than fo
herrings, are annually taken and cu
part of which are exported to Ital
Portugal. When the fish are caugh
lay them in brine for twenty-four
which they hang them by the head or
spits, in a kind of chimney made for
which will hold ten or twelve thous
where they remain till they are suffic
and dried by a fire of brush-wood,
taken down and barrelled for keepin

The pilchard fishery, on the coas
and Devonshire, is a very prof
to the inhabitants of those counties.
larger than the anchovy, but less
ring, which in other respects it may
semble. The season for catching pil
June to September, at which time t
such prodigious shoals, that half a
been taken at a draught. Many
rels are exported every year by th
but our fish, though bigger, are not
lued as those taken on the coasts of F
is principally owing to their not
roughly cured.

The salmon fishery is very co
several places along the coasts of E
nd, and Ireland; but Scotland see
greatest share in this branch
t of the rivers of that country
mon, which are taken at certa
prising numbers, and being pi
only sent to various parts of Englan

rted to Holland, France, Spain, and other
ries. The greatest part of what is sold
ondon by the name of Newcastle salmon,
ught from Berwick upon Tweed, in which
vast quantities are taken: but the fishery at
deen, in the rivers Dee and Don, exceeds
ther in Scotland, and their salmon are rec-
l the best in Europe, which is perhaps owing
ir being well cured, of which the magistrates
particular care. The reader may easily con-
what numbers of these fine fish resort from
a to the rivers just mentioned, when he is
ned that it is no uncommon thing to take
a hundred and fifty head of salmon at a sin-
raught.

CHAP. II.

CHAP. II.

OF FRANCE, INCLUDING LOR ALSACE, &c.

Springs, Caves, &c.

THE natural history of France ca afford us a greater curiosity than the springs at Salins, in the Franche-C county of Burgundy. The chief sprin are situated in the middle of the town, subterraneous caves or vaults, of a g and extent. The descent is by fort stone, and twenty of wood, into a v fifty feet long, and thirty broad, where of the waters, and of the engines them are altogether surprising. In may be seen, by the light of torches, of salt water, and two of fresh, gushin same rock within the space of five yar prevent the waters mixing together, several channels made to convey them rent wells or basons. From hence leads into other vaults, where the dou rest on very thick pillars, and in the one of these is a large bason, into which of the salt springs are gathered. Of t are six or seven, besides those already and ten or twelve of fresh water; all *into different* basons prepared for tha *and are raised* from hence by various

early thirty feet in diameter, and fifteen inches
eep, containing forty-five or fifty hogsheads. A
ery strong fire being made underneath, and gra-
ually slackened, the water is boiled about twelve
ours, in which it evaporates, and leaves the salt
t the bottom of the pan almost dry. Then with
sort of rake they take off the uppermost part of
ie salt, which is the most valuable, being whit-
st and strongest; and the rest is formed into cakes
r loaves, which when dried are fit for use.

The place containing these springs, and all the
orks necessary for making salt, is surrounded
ith a strong wall flanked with towers, and
rowned with a parapet, so that it has the appear-
nce of a fortification. Round the inside of the
all are various buildings, some of which contain
e engines that raise the waters, others the fur-
aces and kettles, and in others the salt is framed
d dried. Some again are filled with casks,
bs, and other utensils, for exporting the salt, and
r the use of the workmen; others serve as ware-
ouses, and in others are kept great quantities of
on, together with the coals for several forges,
hich are continually employed in making new
oilers or mending old ones, the violence of the
re, and the corroding of the brine, wearing them
ut in a little time. The whole space thus en-
—l is almost three hundred yards in length,
hundred in breadth.

These springs, it is obser
equal saltness, nor at all time
to produce more salt after
dry season. To ascertain the
saltness of the several springs
use of a tube, somewhat mo
diameter, and eight inches
filled with the salt water, the
at the bottom of which is
keep it upright; and this sink
water, according as it is im
This stick, having several di
it, shows what quantity of
of water will produce; and
careful to add such a propor
water to the weakest, as may
boiling it; for if the water b
if a hundred pound weight of
least eighteen or twenty pou
will not answer the expence.

Near Bourbon-Lanci, in
mineral spring, which is sai
man cannot keep his hand in
yet an egg left in it a whole
hard. It has neither smell n
burn the lips when drank,
warmth to the stomach.

The burning spring, whic
the wonders of Dauphiné,
about two yards in length,
which there appears a small
that of burning brandy. T
rock of rotten slate; but th
to proceed from any fissure
one perceive any matter p
ashes produced. There is

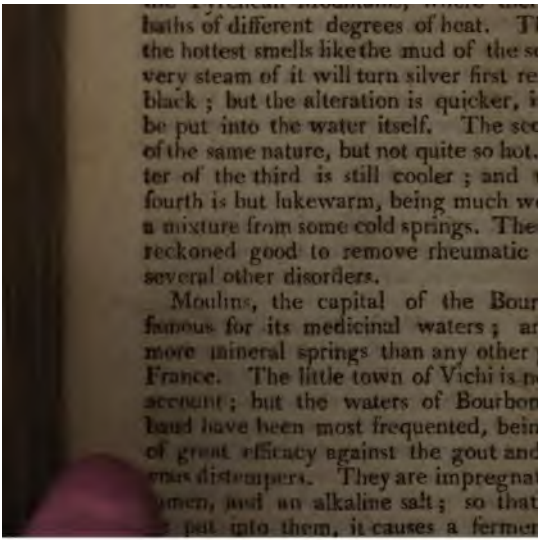
nd very sharp salt petre to be found at some dis-
ance from the flame, which probably is fed by
omething of that nature; but it is remarkable, that
his flame burns much brisker in winter than in
ummer, decreasing gradually as the heat in-
reases, till it sometimes goes quite out, and af-
erwards kindles again of itself. It may easily be
ighted by any other fire, and when this is done it
s attended with some noise. This is probably of
he same nature with the everlasting fire of Per-
ia, of which we shall give a particular account in
its proper place.

In the road from Grenoble to Lyons, there is
a large cavern or grotto, very wide at the en-
trance, but growing narrower by degrees, till we
come to a lake, which is reckoned another of the
wonders of Dauphiné. The French historian
Mezray tells us, that Francis I. who loved to en-
quire into curious and extraordinary phænomena,
had a mind to be acquainted with the particulars
of this subterraneous lake, and for that purpose
ordered a flat-bottomed vessel to be built in the
cave that leads to it, which was done accordingly.
On each side of this vessel they fastened several
boards, on which they placed a great many lighted
torches; and having provided matches, steel, flints,
and other necessaries, with very able watermen,
they put off from the shore with the king. After
they had rowed some time, they perceived the
breadth of the lake was about half a league; but
going nearly two leagues farther, they heard a
great noise, which became more frightful as they
advanced; and they found the water ran with pro-
digious swiftness. Imagining from hence that
there might be some abyss not far off, they took
one of the boards with the torches upon

drift; which, being carr
idity, was soon overset
with this, they would
t returned to the entr

st of Vesoul, in the form
a cavern, which will pr
ice than can be carried a
asures thirty-five feet in
; and the large pendan
g from the roof, produ

When mists are seen
egarded by the neighbo
le prognostics of approa
of observation, that al
terior are always froze
e limpid in winter
Douse.



the Pyrenean Mountains, where the
baths of different degrees of heat. T
the hottest smells like the mud of the s
very steam of it will turn silver first re
black; but the alteration is quicker, i
be put into the water itself. The sec
of the same nature, but not quite so hot.
ter of the third is still cooler; and
fourth is but lukewarm, being much w
a mixture from some cold springs. The
reckoned good to remove rheumatic
several other disorders.

Moulins, the capital of the Bour
famous for its medicinal waters; a
more mineral springs than any other
France. The little town of Vichi is n
account; but the waters of Bourbon
baud have been most frequented, bein
of great efficacy against the gout and
vous distempers. They are impregna
amen, and an alkaline salt; so that
put into them, it causes a fermen

them; there are also some trees, but they are kept low, for fear the wind should lay hold of them, and drive the islands with too much violence. The report, however, that a church and monastery are built upon them, is entirely groundless.

France abounds with quarries of excellent marble, and has its mines of iron, copper, and lead, and even some of gold and silver, which last are not worked at present, the profit not answering the expence. Near Alet, a village at the foot of the Pyrenean Mountains, it is said that gold was dug in the time of the Romans; and the rivulets that spring from thence still carry a golden sand along with their waters. In 1672 M. Colbert caused these mines to be worked, but finding only a few veins of copper, the undertaking was soon laid aside.

VEGETABLES.

IN describing the most curious vegetable productions of France, it seems proper to begin with the vine, which is so universally esteemed on account of its fruit, and the rich liquor it affords. This plant was first brought from Asia to Europe; the Phœnicians, who were early navigators, ; the Mediterranean coasts, transferred it to of the islands, as well as the continent. It eded admirably in the isles of the Archipe- and was afterwards introduced into Greece Italy. From thence it passed the Alps, being *at Marseilles* and other places, when Gaul *conquered by* Julius Cæsar: but its culti-

tion was prohibited by Domitian, and neithe
Gauls nor Spaniards were permitted to plant i
the reign of the emperor Probus, who was
sible, that the promotion of agriculture oug
be inseparable from a good government. V
were at length propagated through all France
Spain; the German nations on the banks o
Rhine followed the example; and by de
they were planted in all countries where there
any probability of their success.

The species of vines are almost infinite,
the manner of their culture is different in diff
countries. The plant itself is naturally weak
nature has furnished it with small tendrils, w
it clasps round bodies that occur in its way,
supports itself by their assistance. In France
raised on a single prop; but in some countri
is customary to support it by a strong reed, a
or wooden forks. It is common in Greece
Italy to train up the vines to elms, along
branches whereof they extend themselves
strained, and gradually ascend to the top.
was an ancient practice in Italy, as appears
many passages in the classics, particularly V
who describes it in the following lines:

—— Superest ——
Tum leves calamos, & rasæ hastilia virgæ,
Fraxineasque aptare sudes, furcasque bicornes,
Virilius enim quarum & contemnere ventos,
Assuescant, summasque sequi tabulata per ulmo

GEORG.

precaution of his rural cares
reeds and forked props prepares:
e vines their clasping progress form,
the rigors of each rising storm;
he hospitable elm, and spread,
swelling clusters o'er its verdant head.

is certain, however, that those vines which
at liberty upon high trees, and are never
ned, afford the smallest wines; those that are
to stakes about four feet high, and are duly
ned, yield stronger wines; and those yet
nger that are kept nearer the ground.
n Asia, where they have several species of
y large grapes, they dispose their vines on
ed works of lattice, which form so many ar-
s, under which the natives enjoy a refreshing
le. In a word, the inhabitants of each coun-
practise such methods as they think are best
pted to their necessities; but none seem to be
er acquainted with the management of the
e, and conducting the process of a vintage,
n they are in several provinces of France, es-
ially in Champagne and Burgundy.
The vine should never be planted in such strong
as are fit for corn, but in one that is thin and
t, rather dry than moist, and intermixed with
vel; and the declivity of a hill, lying to the
th, is the best situation for a vineyard. The
pagation of the vine is by slips or cuttings,
ch should stand two or three years in a nur-
before they are transplanted into the vine-
d; and it may likewise be propagated by
ers, that is, by bending such of the finest
ots as should otherwise be pruned off, and
ying the old wood in a little trench, while that
ch is young rises above the surface. Some
e-dressers think the spring is the only proper
on for pruning; but those who perform that
ration immediately after the fall of the leaf,
be convinced of the advantage of it the en-
g year. Those vines in France that are suffer-
about to the height of five or six feet, are laid

down in a trench once in fifteen
with earth; and three or four
are extended in little trenches
order to furnish so many layers.
November; and the old wood
itself in a fresh soil, resumes a
the vines of low growth, which
wine, and are never permitted
three feet, are laid in the cart
not so deep as the former. Th
the high vines are laid in the
unnecessary to furnish them wit
the low ones must have a suppl
fifteen years. A moderate quan
likewise be applied every sev
the soil is very light, and every
it happens to be stronger. T
for training vines to their prop, i
are just appearing; and about
ends of the branches should be
little shoots retrenched that ris
and sides of the stock. It is
different times, to clear away the
about the stems, whereby t
chilled or impoverished.

When the grapes are ripe,
rious in their wines make thre
ings, first chusing the bunches
have the fewest, but fines
ful to pick off all rotten or
her with such as have been
e second gathering they
k clusters, that are not qui
thers, and lastly, those that ar
or rotten. Each of these gath
separately, and the difference

s easily apprehended. The grapes intended fo
hite wine are pressed immediately after they
re gathered; but those for red wine are not
ressed till they have been trodden, or squeezed
etween the hands; and the skins and pulp have
ood together in the vat to acquire the requisite
ncture. And here it may be proper to observe,
at all white wine is not made from white grapes;
ut the very best and whitest wine, even that of
hampagne, which has the complexion of crystal,
produced by the blackest grapes. The wine
f these grapes, if not bruised, nor heated much
y the sun after they are gathered, but immedi-
ely carried to the press, will be perfectly
hite; but the wine produced by the second,
ird, fourth, and fifth pressings, will be gradu-
ly reddened, as the press operates more effec-
ally on the skin of the grape: and therefore the
apes for red wines are trampled and thrown into
vat before they are pressed, it being found by
perience, that the complexion of those wines
aler or deeper, according as the juice of the
s is intermixed with that of the pulp in a lesser
reater degree.

he wine being drawn out of the vat, and dis-
ted into proper vessels, is suffered to fer-
in the air for some days, according to the
ess of the grapes, and the temperature of
ason. Then the vessels are gently stopped,
o let the most fiery particles of the wine ex-
or some time; after which it is lodged for
nter in an upper cellar, from whence it is
d into lower vaults as soon as hot weather
, but is kept there no longer than the close
un.—*As to* the management of wines in
r, *the* manner of drawing them off from

the lees, the expedients used to fine th
&c. the particulars are too numerous t
description in a work of this nature.

The olive-tree claims our attention i
place, as it yields an oil of almost unive
food, medicine, and manufactures.
to perfection in the southern parts of Fra
ticularly in Provence, the oil of which
by some preferred to that of Spain or I
leaves of the olive-tree resemble those o
low; and its fruit, which has a ston
about the size of a small nutmeg. T
whilst upon the tree, are exceedingly b
this bitterness is corrected by the meth
ing such as are preserved for eating.
tended for this use are gathered long b
are fit to yield their oil, and laid to
some days in fresh water; after which
put into a lye made of ashes and lime,
removed into a liquor of salt and wa
which they are put up into little barrels
abroad. To give them a fine flavor, th
over them an essence composed of clov
mon, coriander, fennel, or other arom
this is a secret amongst those who deal
in which indeed lies all the difficulty of
[illegible]. To extract oil from olives,
[illegible] under a mill-stone, and reduced
[illegible], being mixed with hot water,
[illegible], the oil swimming upp
This is what we call
[illegible]untries where olives g
instead of butter.
[illegible]dismiss this article with th
[illegible]ich is pretty much like the fo
[illegible] in building, being almost as

It grows on many of the mountains of
hiné, and it is said, that about Briançon they
r a kind of manna that falls upon its leaves
e night-time; but this is probably one of the
nded wonders of that province. It is cer-
however, that it produces agaric*, a sort of
us excrescence, growing on its trunk or
branches, which is of use in physic, and in
; scarlet.

ANIMALS.

SIDES the animals common to Britain,
e has the wolf in its woods, and the Cha-
goat upon its mountains.

e wolf is a very large and fierce animal: it
ize equal to the biggest mastiff; and has the
al appearance of that creature; the head is
and fleshy; the eyes, which are large and
inent, have a very bold and fierce aspect,
heir iris is hazel; the ears are short, patu-
and erect; the teeth are very large, and
imal has a way of showing them in a fright-
anner, by grinning; the neck is robust and
; and the ancients supposed the creature had
e power of moving it: but this is a mistake,
e wolf turns his neck about more readily

garic grows chiefly on the larch-tree, but is also
on several others. This of Dauphiné is inferior to
ought from the Levant, which is found in Muscovy
artary. It is light, smooth, brittle, of a bitter
nd was a medicine of great repute among the an-
ut is almost banished out of the present practice.

than any of the dog kind; and t
it is not at all rigid. The bod
back broad; the legs are me
very robust; and the tail, whic
like that of the fox, turns natur
constitutes its specific distinct
colour of this animal is black;
tawny; and in many places, t
perfectly white. The voice
sembles the howling of a dog
bark in the manner of that a
tive of most parts of Europe,
inhabitant of Britain. Cattle
crifice to it; and in hard winter
afford no food, they will com
and attack houses and villages.

The Chamoise, or Rupicapr
rians, is a species of goat, wit
horns; the generic characters
that the horns are hollow, cre
the fore teeth are eight in num
terior ones shorter than the oth
canine teeth; the feet are cover
the teats are situated in the gro

The Chamoise is a beautiful
refer it evidently to the goat
whole form has more the appea
the head is long and narrow
top, and obtuse; but very sma
of the nose; the eyes are large
minent; the ears are patulous
are of a singular make, stan
are seven inches long; they a
near the top, where they are
shape of a hook, and are shar
are of a very dark brown, n

, and are annulated on the under part, and
d lengthwise on the upper: they are hol-
and the cavity is filled up by a bony matter
ng from the skull. The neck is slender, the
full, broad, and well formed; the body is
ery bulky; the legs are slender and long:
hole body is covered with a deep fur, waved,
mewhat curled at the inner part of the ears:
rehead, the throat, and the belly, are white;
per part of the head over the eyes has, on
ide, an oblong spot of yellow; the whole
besides is of a blackish colour; and the tail
ker than the rest. The hooked form of the
the horns in this species has given occasion
error of supposing that it hangs by them to
cks, and to many other tales equally absurd
diculous.

ough the silk-worm is not originally a na-
f France, nor even of Europe, yet, as the
h breed and manage them very successfully
ir southern provinces, and have brought
ilk manufactures to great perfection, it may
improper to give an account in this place,
t wonderful and profitable insect. It was
l the year 555, that two Greek monks, re-
g from the Indies to Constantinople, brought
hem a number of silk-worms, with instruc-
or hatching their eggs, rearing and feeding
orms, drawing out the silk, &c. upon
manufactures were set up at Athens,
s, and Corinth. In the twelfth century,
, king of Sicily, established a manufactory
lermo, and another in Calabria, having
ht workmen from the cities of Greece,
he had conquered in his expedition to the
and; and by degrees the rest of Italy, as
Spain, learned the art from the Sicilians

and Calabrians. In the reign of H
French began to imitate their neig
good success; and king James I
desirous of having mulberry-trees
silk-worms propagated in his Britis
where, from various experiments, it
will thrive and work as well as in a
of Europe.

This insect, from a small egg, ab
of a pin's head, becomes a large w
got, of a whitish colour, inclining t
this state it feeds on mulberry leave
come to maturity, it winds itself up
bag or case, about the size of a p
and is metamorphosed into a crysa
remains without any signs of life or
at length it awakes to become a bu
making itself a passage through i
pulchre. It dies at last, having, l
seed, prepared itself for a new life
warmth of the ensuing summer ena
sume.

There are two methods of bring
curious insects, either by letting th
at full liberty on the mulberry trees
them, as is practised in China a
countries; or else, as it is customar
by keeping them in rooms furnished
pose, with a sort of hurdles made of
which are fixed in horizontal range
another; and under every range th
which, like the bottom of a cage, m
out at pleasure. Over these hurdles
mulberry leaves, upon which the
and they are supplied with fresh
morning. The leaves should be

ason, and kept in a place where no mois-
n come. In fine weather fresh air should
into the room from time to time, and great
ken to keep the place as neat as possible,
larly to cleanse the floors appointed to re-
the fragments of their leaves and other
ties; for cleanliness and good air contribute
to their growth and welfare.

worms are hatched in boxes lined with
or paper, over which it is usual to spread
oft mulberry leaves; and from hence, when
ave gained a little strength they are re-
to the ranges of hurdles. When the silk-
leaves its little egg, it is perfectly black,
head is of a more shining sable than the
In a few days it assumes a whitish hue;
ash-grey; after which its coat sullies, and
es ragged, at which time the animal casts
and appears in a new habit. As it in-
s in bulk, it grows whiter, but a little in-
to a green; till ceasing to feed, and sleep-
r almost two days, it divests itself of its
second time, and appears in its third ha-
s colour, head, and whole form, being so
changed, that one would almost suppose it
nother animal. It now begins to eat again,
ontinues to do so for some days, when it
es into its former lethargy, at the conclu-
f which it once more quits its covering;
aving continued feeding some time longer,
th it renounces all feasting and society, and
es for a retirement, by building itself a
cell of admirable structure and beauty.
e beginning of this curious work looks like
ion, being only a sort of down or flue to
off the rain, nature having ordained these

[illegible] perfection; [illegible]
[illegible] a [illegible] matter, [illegible]
[illegible] remained in this state [illegible]
[illegible] weeks, and sometimes longer.
[illegible] a perfect butterfly, and [illegible]
[illegible] at the [illegible] of the cone, which
[illegible] cemented, [illegible] so exactly [illegible]
[illegible] covering.

Before the butterfly leaves its apa
frees itself of all that superfluous [illegible]
had been serviceable to it in its forme
which evacuation the silk is soiled and
as well as by the opening the creature
its escape. To prevent this, the cone
for use are exposed to the heat of the s
in an oven, by which means the insect i
before it comes to the state of a butte
only being permitted to arrive to tha
which are designed to lay eggs for a f

s, and so are drawn out and fastened to the
eight, ten, or twelve of them, being joined
her, according as they would make a weaker
tronger thread. The workman then gives
on to the reel, guides his threads, substitutes
ones when any of them break, and strengthens
where necessary, by adding others, till the
s exhausted. Then the cones, after opening
with scissars, and taking out the insects, are
ed three or four days in water; and being
softened, and cleared of their gummy matter,
are boiled in a lye of ashes well strained, then
ed in a river, and dried in the sun. Thus
ared, they are carded like wool, and yield a
of silken flax, which is spun with a wheel,
woven into stuffs of an inferior value.
me who have considered attentively the fine-
and length of the thread which the silk-worm
, think they speak within compass, when
affirm, that each cone or ball contains silk
gh to reach the length of six English miles.
however is certain, that an ingenious person
ng measured the silk drawn from one of these
, it was found to measure above three hundred
s, and yet weighed but two grains and a

o these remarks concerning the silk-worm, it
not be improper to subjoin a short account of
ilk of spiders, which the French have had
uriosity to manufacture into gloves and stock-
. The discovery is owing to M. Bon, a mem-
of the academy at Montpellier, who in the
1710 published a dissertation on the subject,
rein he *reduces* all the different sorts of spi-
to two principal kinds, viz. such as have
gs, and such as have short ones, which last

are those that furnish the silk. These animals spin their silk out of the anus, around which are five papillæ, or small nipples, whereby the threads are formed, some weaker and some stronger, according to the use for which they are designed. The weaker sorts of threads are those which serve to make their webs, in which they catch flies; but they spin a much stronger kind, wherein they wrap up their eggs, and by that means preserve them from the cold, and from such insects as would destroy them. These threads they wind loosely round the eggs, resembling in shape the balls or bags of silk-worms that have been prepared and loosened for the distaff. Having collected twelve or thirteen ounces of these bags, M. Bon had them well beaten for some time with the hand and a small stick to get out the dust. He then washed them in warm water, changing it several times till they left the water very clean, and afterwards laid them to steep in a large vessel with soap, salt-petre, and gum arabic. Then letting the whole boil together two or three hours over a gentle fire, he washed them again in warm water to free them from the soap, and laid them to dry some days to prepare them for carding; which was performed by the silk-carders, but with cards much finer than ordinary. By this means he had a silk of a particular ash-colour, which was easily spun, and the thread was stronger and finer than that of common silk. Of this he caused stockings and gloves to be manufactured, and found that three ounces of it would make a pair of stockings for the largest man; whereas those of common silk weigh seven or eight ounces.

The possibility of making this silk being there

only difficu'ty lies in procuring a sufficient
ıtity of spiders bags; which would be no dif-
ty at all, if we had the art of breeding them as
do silk-worms; for spiders multiply much
e, and are not so subject to diseases. M. Bon,
kept a great number of young spiders in
er coffins and pots covered with paper pricked
of pin-holes to give them air, observed, that
:ven or eight hundred scarcely one died in a
, whereas of a hundred silk-worms not forty
d to make their bags. This gentleman pro-
d his spiders in the months of August and
ember, at which time their eggs are hatched,
old ones that laid them dying soon after.
rom M. Bon's experiments it was at first sup-
d, that great advantage might have been
le of these insects; but M. Reaumur, who
appointed by the Royal Academy of Sciences
ıake a farther enquiry into this new manufac-
, gave no hopes of its ever turning to any ac-
nt. The natural fierceness of the spiders, the
erves, renders them unfit to be bred and kept
ether; for having distributed four or five thou-
d into different cells, fifty in some, a hundred
wo in others, where they were fed with flies
the ends of young feathers, the large ones de-
red the little ones, so that in a short time they
e almost entirely destroyed; and to this incli-
on of devouring one another, we may in some
ısure ascribe the scarcity of spiders, consider-
the number of eggs they lay. It is therefore
ossible to establish these creatures into a com-
ıity; and were it practicable, it would require
much room and application, because a much
ter number of spiders than of silk-worms would
ecessary to produce the same quantity of silk.

besides that the spider's bag is inferi
the silk-worm both in lustre and str
cording to M. Reaumur's compu
thousand three hundred and four wor
duce a pound of silk; and as he
work of twelve spiders only equals tha
worm, a pound of silk would require t
thousand, six hundred, and forty-eig
nay, he supposes double the numb
kept for that end, as the bags are only
females.

We might here describe the delica
derful texture of the spider's web, a
ner of weaving it; but as every one ha
tunity of making his own observatio
matters, we shall pass them by, and o
tice of an admirable faculty some spe
insects are endued with of conveying
from one place to another, which perh
unknown to many of our readers.
when desirous of changing its situa
perpendicularly by a thread, and turn
towards the wind, shoots out several
its anus, like so many darts, which b
to and fro by the air, fasten on tree
other solid bodies. If the insect per
are fast, which she tries by drawing t
her feet, she makes use of them as a br
to the place where they are fixed. Bu
all; for it has been observed, that sp
times dart out threads to a surprising
then, breaking the thread which th
let themselves loose, and are carr
...gh the air, seizing on gnats and o
...r passage. In autumn the air
...hese floating threads, which un

adhere to every thing in their way; and this
ns to be the chief season of the spiders sailing
his manner, though they dart their threads at
:r times, and breaking them off, let the wind
y them away.

ANTIQUITIES.

MANY parts of France abound with curious
uments of antiquity; and particularly at
mes, a very ancient city of Languedoc, there
stately remains of a Roman amphitheatre,
ch is counted the finest monument of the kind
r extant, and was built in the reign of Anto-
is Pius, who contributed a large sum of money
ards its erection. It is of an oval figure, one
sand and eighty feet in circumference, capa-
is enough to hold twenty-three thousand spec-
rs. The architecture, says Dr. Smollet, is of
Tuscan order, sixty feet high, composed of
open galleries, built one over the other, and
sisting of sixty arcades. The entrance into
arena was by four great gates with porticos;
the seats (of which there were thirty, rising
above another) consisted of large blocks of
ne, many of which are still remaining. Above
north gate are two bulls, cut in alto relievo,
remely well executed, emblems, which, ac-
ding to the custom of the Romans, signified
t the amphitheatre was erected at the expence
the people. In other parts of the structure is
ne work in basso relievo, and heads or busts,
these are indifferently carved. This amphi-

and encompassed it with a broad and de
which was filled up in the thirteenth cent
all the subsequent wars, to which this cit
posed, the citizens fled to it as a place of
whence it sustained a great number of
attacks, so that its preservation is almos
lous. It has, however, suffered much m
the Gothic avarice of its own citizens, v
shamefully mutilated it, for the sake of th
which they have employed in their own
buildings. There are also in France the
of several other amphitheatres, particula
rigueux, in Guienne, at Chalons, in B
at Arles, in Provence, and at Vienne,
phiné.

A building at Nismes, called the Mais
exhibits the most exquisite beauties of
ture and sculpture. This edifice is sup
been erected by the emperor Adr
lly built a Basilica in this city, thou

nty columns, engaged in the wall, and the istyle, which is open, with ten detached pil- s that support the entablature. They are all the Corinthian order, fluted and embellished ith the most exquisite sculpture: the frize and rnice are worthy of admiration, and the foliage esteemed inimitable. The proportions of the uilding are so happily adjusted, as to give it an ir of majesty and grandeur, which the nicest pectator cannot behold without emotion. Mr. Smollet, on mentioning the ornaments of the build- ing, says, they are indeed so exquisite, that you may return to them every day with a fresh appe- tite, for seven years together; and that what ren- ders them the more curious is, their being still en- tire, and very little affected, either by the ravages of time, or the havock of war. Cardinal Alberoni declared, that this structure was a jewel that de- served a cover of gold, to preserve it from exter- nal injuries.

There are here also noble remains of Roman baths, and the ruins of an ancient temple, which, according to tradition, was dedicated to Diana: but connoisseurs observe, that all the ancient tem- ples of that goddess were of the Ionic order, whereas this is partly Corinthian, and partly Com- posite. It is about seventy feet long, and thirty- six in breadth, arched above, and built of large blocks of stone, joined together with great exact- ness, though without any cement: the walls are still standing, with three great tabernacles at the far- ther end, fronting the entrance. On each side are niches, in the intercolumniation of the walls, with pedestals and shafts of pillars, cornices, and an entablature, which show the former magnifi- cence of the building.

Among the antiquities of Fran
forget the famous Pont du Gard
on the right hand, about the dis
from the post-road from Montpe
and about three leagues from the
though raised in the Augustine
man colony of Nismes, to con
water between two mountains,
that city, is still extremely fresh
ing either so pure and dry, or th
which it is built, so hard, that
remain as acute as if they had be
Some large stones have indee
of the arches; but the whole is ad
ed, and exhibits a piece of arch
fectedly elegant, that Mr. Smol
defy the most phlegmatic spect
without admiration. It crosses t
rolling over rocks, that form a n
natural cascades, and is over-sha
ded with trees and shrubs, whi
the rural beauties of the scene.
sists of three bridges, or range
above another; the first of six,
ven, and the third of thirty-six.
cluding the aqueduct on the to
hundred and seventy-four feet, a
tween the two mountains extend
dred and twenty-three. It is of
but its symmetry is inconceivabl
of Avignon have improved the R
a new bridge, constructed on th
that of the lower tier of arches,
it appears to be a part, affording
modious passage over the riv
carriages of all kinds.

veral cities of France we also find the re-
f triumphal arches, which it was the cus-
he ancients to erect, not only to adorn a
on returning from a victorious expedition,
preserve the memory of the conqueror to
y. There is one of these at Rheims, in
agne, consisting of three arches, with
red columns, and adorned with bas-reliefs.
ddle arch, which is the largest, is thirty-
t high, and fifteen wide, having on it the
f a woman, with two cornucopias in her
which perhaps were intended to denote the
ess of the country; four children about
ress the four seasons of the year; and the
months are represented by so many statues.
of the side arches is the story of Romulus
mus sucking the wolf, attended by the
d Faustulus and his wife Acca Laurentia;
the other arch is Leda embracing Jupiter
med into a swan, and a cupid lighting them
lambeau.—One of the present gates of the
Orange was a triumphal arch, erected by
ius, on account of a victory obtained over
nbri and Teutones, who made an inroad
ly. Here are also the ruins of a Roman
and various other remains of antiquity.
Autun, in Burgundy, are several ancient
s and pyramids; but of all the curiosities
ind in France, there are none so much ad-
s a fine obelisk of oriental granite, at Arles,
ence, which is fifty-two feet high, and
diameter at the base, and yet all but one
It lay hid many ages in the ground in a
garden near the Rhone, till the magistrates
it to be dug up in the year 1675, and
in the city, of which it is one of the or-
.

blest ornaments.—At Autun may
the remains of a temple of Janu
Janitoye; and the ruins of other
are to be found in several oth
country.

It would be tedious to enum
of aqueducts, public baths, a
structures; and therefore, to th
antiquity already mentioned, w
the large round buckler of mas
twenty inches in diameter, and
one pounds) which was taken
near Avignon in 1665. It is ab
nine hundred years old, and is ch
Africanus, half-mantled, attende
cers, and the Spaniards supplic
virgin; it being consecrated to
neral upon his restoring a beauti
lucius, prince of Celiberia, to
espoused.

BUILDINGS.

WE shall begin this article w
of Notre Dame at Paris, not
finest structure of that kind, but
ated in the metropolis. It is
building, said to have been foun
deric in the year 522, and finis
sors; but it is rather strong than
is built in the form of a cross, h
the middle, and at the west end
towers flat at top, with galleri
the outside. The statues of tw

France are placed in a row of niches on the front, and the roof, which is very lofty, is supported by a hundred and twenty large pillars. The fine paintings, rich tapestry, and magnificent monuments, which formerly adorned the interior, have been destroyed by the mad rage of revolutionists; but the choir is still decorated with some curious carvings in wood; and the circular windows of painted glass are extremely beautiful.

The cathedral of Sens in Champagne, which is dedicated to St. Stephen, is a large and stately edifice, remarkable for the figures that adorn its front, and its two lofty towers. The inside is admired for its rich chapels, its ancient tombs, and particularly for its high altar, at the foot of which is a beautiful table, representing in bass-relief the four evangelists, and St. Stephen on his knees.

The cathedral of Rheims, in the same province, is a very fine building, in the Gothic taste; the architecure is delicate, and the gate and portico are reckoned the most stately in the whole country. It is also famous on account of its being the church where the French kings were formerly crowned and anointed by the archbishop of that city.

The cathedral church of Rouen, in Normandy, dedicated to the Virgin Mary, is a vast and beautiful structure, having three lofty towers, on one of which is a tall wooden spire, covered with gilt lead, that makes a noble appearance. Over the great gate is a triumphal arch, in honour of king Henry IV. with emblems of his victories over the Leaguers, who are represented gnawing their chains. In this church are many magnificent tombs of the ancient dukes and archbishops, an

also that of John, duke of Bedford, wh
gent of France under Henry VI. of Engl
that which generally attracts the attention
gers is the great bell that hangs in o
towers, which is thirteen feet high, and
about forty thousand pounds.

The cathedral at Lyons, dedicated to
is a magnificent and venerable fabric;
front of the high altar, which stands in th
of the choir, was formerly adorned wi
dance of fine images, most of which have
faced or destroyed during the late com
This church has long been famous for th
ing mechanism and motions of its clock,
placed in an aisle near the choir. On t
it stands the figure of a cock, which eve
hours claps his wings and crows thrice;
door opens on one side in a gallery unc
out of which comes the Virgin Mary, an
door on the other side an angel meets an
ber. At the same time a door open
from whence the form of a dove, represe
Holy Ghost, descends on the Virgin's hea
this they retire, and from another door o
figure of a venerable father, lifting up l
and blessing the people. The days of t
are represented by seven figures, each e
takes its place in a niche on the mornin
day it represents, and continues there t
night, when it retreats, and is succeeded
ther. There is likewise a very singular
belonging to this clock. viz. an oval or
plate, marked with the minutes of an hou
are pointed to by a hand reaching the c
rence, and which insensibly extends and
itself during its revolution, so as exactl

t as well as the longest diameter.—But the must suppose this is rather an account of he clock has been formerly, than what it is sent, many parts of it, through length of being much impaired *.

re is another cathedral that deserves to tioned, namely, that of Strasburg in Alsace, , though formerly a part of Germany, is nnexed to the dominions of France, and re belongs to this chapter. It is certainly f the finest churches in Europe, and its is a noble lofty pyramid. In this church s a clock, which is generally esteemed as a -piece of astronomy and mechanism, and, n its perfection, seems not only to have ex- that at Lyons, but perhaps had not its in the world for the variety of its figures otions, many of which are now entirely d, or much out of order. The basis or tion of this curious machine consists of three a square one on each side, and a round the middle. This round one has three cir- e within another, two of which are move- nd the third fixed. The outermost is ten diameter, and turns about once in a year, the months and days. The circle within hose diameter is a foot less, was made to und in the same time, and show the vigils ivals, which it did during a whole century, ow stopped. The innermost serves only ornament, containing a representation of

* clock was repaired and improved by one Nou- 1661; but it was contrived long before that time. olas Lipp, a Native of Basil, who finished it in The elliptical minute-motion was invented by M. and is of a later date.

Alsace, and the city of Strasburgh, and is t
immoveable. The two square plates used
out the eclipses of the sun and moon, but
not now perform that service.—Above the
is another large plate, in the middle of
an astrolabe showing the course of the h
with the four seasons painted round it.
also a dial-plate, which shows the hours
nutes; and underneath it the seven days
week, represented by the seven planets,
turns in a chariot. Here is likewise a fac
moon, showing its age and different as
In the third or uppermost part of the
are four figures, representing the four
man's life, which come and strike on sm
every quarter of an hour. A cock made
stands on the top of an arch, stretches out
and proclaims the hour by crowing. The
Death, driven away by Christ risen fi
dead, who nevertheless permits him to st
hour, that men may remember they are m
This wonderful piece of machinery was
in the year 1573, but the artist who con
is unknown.

From the churches we proceed to take
of some of the palaces, and first of the
which is the chief ornament of Paris. Thi
edifice is situated on the river Seine, but h
been finished according to the original
The west front was erected by Lou
who built a large pavilion, in form of a
over the gate, supported by two rows o
of the Ionic order. In the middle of
front, which was built at a vast expence
XIV. and is a hundred and seventy-five
length, is the principal gate, with a p

rted by forty Corinthian columns; and the artments within are answerable to the noble apearance of the exterior. In this building are posited the grand collections of Flemish and Ita- paintings, brought from the conquered coun- s; together with a number of statues, by the st celebrated masters. It is, also, in contem- tion to add the national library to these col- tions.

The palace of the Thuilleries, which was be- n by queen Catharine de Medicis, about the ar 1564, and finished by Henry IV. in 1600, noble and extensive edifice, with a square pa- ion at each end, and a dome in the middle; l the whole is adorned with columns, pilasters, l other architectural ornaments. The gardens extremely beautiful, being kept in the most fect order, and decorated with many capital ecimens of ancient and modern sculpture. This lace is at present inhabited by the three con- s; and the clock which ornaments the dome is ided, according to the new mode of numera- n, into decimal instead of duodecimal parts.

The edifice formerly known by the name of Luxembourg, but now called the Palace of Conservative Senate, is a beautiful and regular lding, of the Tuscan and Doric orders, with a e cupola in the front. At the entrance is grand court, on each side of which is a long lery, containing some fine paintings, and seve- marble tables, curiously inlaid in the Mosaic te. The apartments of this palace are ex- nely grand, and the gardens are laid out with nal taste and elegance.

The Palace of the Legislative Body, formerly ed *Palais Bourbon*, is situated on the bank

present themselves to the right and le
to two halls, one consecrated to
other to Victory. These communicate
with apartments of the ancient pala
opposite side opens into the rooms of
Equality.

The hall, appropriated for the sitt
legislative body, is of a semi-circula
the rails which confine the seats
crowned with brown ornaments. Th
of the tribune is decorated with a bas
niches near the president's seat are fill
tues of Lycurgus, Solon, Demosthe
Cato, and Cicero; the great doors
into the hall are of solid mahogany,
gold; and the centre of the marble
ornamented with a variety of alle
blems.

But of all the palaces in France, t
sailles, about nine miles from Paris, i
bly the most magnificent. It stands

e outer court of the palace is surrounded with
ngs, which were formerly inhabited by the
laries of state, and leads into another court,
is paved with variegated marble, and adorn-
ith a handsome fountain and bason. At the
l angles of this court are two arcades, one
ng to the south, the other to the north ter-

e palace itself is said to be nearly two thou-
English feet in length, and consists of a
d floor, a first floor, and an attic story. The
pilasters, and isolated columns of the same
, which adorn the front, are peculiarly ele-
; and the entablature of the attic supports a
iful roof crowned by ballustrades, and orna-
ed with trophies, vases, &c.
aving examined the exterior of this superb
e, the spectator should pass along the arcade
site to the chapel, and ascend the marble
case which leads to the apartments. Many
beautiful paintings which formerly deco-
these rooms have been removed to the Mu-
of the Arts at Paris, but there still remains
eful assemblage, which excites universal ad-
ion.
e museum contains a surprising collection of
al and artificial curiosities, and consists of a
uit of apartments; the first of which, called
Saloon of Hercules," is esteemed the glory
French school. This magnificent apartment
ty-eight feet in length, and fifty-eight in
th, and is ornamented by a series of Co-
an pilasters, the bases of which are of bronze,
he capitals of gilded metal. The ceiling,
d by Le Moine, is one of the finest compo-
in Europe.—Mount Olympus, and the dei-

ties of fabulous history, are here beautifi
sented; and nine groupes on three s
partments display the apotheosis and
Hercules, in a most admirable manne
groupes, consisting of a hundred and
figures, are enclosed in a fictitious atti
marble, placed above the cornice, an
with garlands of oak-leaves in stucco.

Among the principal attractions in t
are two charming paintings by Paul V
The first, presented to Louis XIV. by th
of Venice, is thirty-two feet in breadth,
in height, and represents our blessed R
the house of Simon the Pharisee: the ot
hangs over the marble chimney-place,
square, and is descriptive of Rebecca's
with Eleazar, the servant of Abraham.
is a beautiful statue of Cupid bending
which has been removed hither from
anon.

The second apartment, called the Ha
dance, contains several interesting pict
the cieling is finely painted by Houass
tue of the Goddess of Abundance is p
pedestal at the extremity of the room,
tues of Apollo and Ganymede, placed
distance, form appropriate and corres
naments.

In the saloon of Diana are four beau
ings by Trosse and Audran, and a ba
white marble, representing the flight
The cieling, painted by Clanchard, d
moon, under the figure of Diana, dra
hinds, and accompanied by the attribu
ting and navigation.

ıe cieling of the fourth apartment, entitled
on of Mars, is a representation of that god,
n his car, and surrounded by his military
:s. Four pictures which adorn the walls
ogous to the above subject: and here are
statues of Health and Sickness, together
nagnificent clock of curious mechanism.
Saloon of Mercury is ornamented by a
ıainted cieling, and some admirable pic-
and contains a magnificent cabinet, which
ıigned as a repository for jewels, and other
of great value.
sixth apartment is called the Saloon of
and on the cieling is an admirable repre-
ın of that heathen deity, seated in his car,
:ompassed with his various attributes.
cieling of the saloon dedicated to Bellona,
ed by Le Brun, in a very masterly man-
ınd on the jamb of a fictitious chimney-
is an oval bass-relief, enclosed in a marble
and representing Mars on horseback. In
litious opening of the same chimney-piece
her bass-relief, which displays a woman
; at a table, and surrounded by genii.
ıartment is also decorated with some statues,
ırble vases.
great gallery, which measures upwards of
ıred and seventy feet in length, thirty-two
dth, and forty in height, is lighted by se-
ı large windows; and in the opposite ar-
re as many looking-glasses, by which the
s and all the objects in the gallery are re-
. Between the arcades and the windows
ty-eight marble pilasters, with bases and
of gilded bronze; and a considerable num-
busts and vases are placed on tables in va-

rious parts of the gallery. On the a
are twenty-seven pictures, which r
symbolical figures, the most striking
reign of Louis XIV.; and the com
which they are distributed, are de
fictitious architecture, and supported
gilded bronze. The genii of the arts
are also employed in ornamenting th
their various attributes; and the corni
lished with trophies, groupes of ch
wreaths of flowers.

The Saloon of Peace forms a ter
the great gallery; and its cupola, pai
Brun, represents France on an azure g
in a magnificent car, and crowned
while Peace, and a band of cupids, ar
in uniting turtle-doves, from whose n
medallions, symbolical of the alliar
during the reign of Louis XIV. This
the apartments of the late Maria Antoi
by a sad reverse of fortune, was hurl
pinnacle of greatness to a dungeon,
tually sacrificed to the blind rage of a
impious faction.

The two apartments which comp
are extremely handsome, and superbly
ed with looking-glasses, vases, busts, ar
In the latter of them, among many othe
objects, are twenty-two pictures by
brought from the convent of the Ch
Paris.

The apartment at the foot of the
case was built for the performance of
the occasion of the late king's marria
rendered peculiarly interesting, by

tal paintings and other ornaments which
:e the interior.

chapel is a noble monument of the piety
nificence of Louis XIV. Its external em-
nents consist of a series of Corinthian pi-
crowned with an attic; vaulted arcades
nted with genii; and a number of large
representing the evangelists, the apostles,
ers of the church, and the theological vir-
The interior is equally striking and mag-
:.—The roof is supported by a series of
lled columns, between which there is an
ballustrade of gilded bronze. The high-
lined with polished marble, and ornament-
h some beautiful figures of angels in the
adoration; and the dome is enriched with
exquisite paintings, representing the Holy
in his Glory, the Resurrection of our Sa-
and the descent of the Holy Ghost upon
ostles.

it we have said may give the reader some
tion of this majestic edifice; but we must
iit the subject without taking some notice
beautiful gardens, which may be reckoned
the modern wonders. In two basons, be-
e terrace, are several water-spouts or jets
and in the middle of each is a collection
its in the form of a wheat-sheaf, which throw
ter to the height of twenty-nine or thirty
The borders of these basons are adorned
everal groupes of brazen figures, represent-
rer nymphs, cupids, &c. In the angles of
arterre are two other basons of marble,
the spouts form two fine sheets of water,
on the borders are several figures of ani-
nade also of brass. Below these ba-ons

another fine one, in the middle of which is the figure of Latona, with her two children, Apollo and Diana. She is supposed, according to the story, to have made her complaints to Jupiter of the ill treatment she met with from the peasants of Lycia, who for their punishment, are here represented as metamorphosed into frogs, which throw out above seventy spouts of water. The figures are of white marble, and the whole is reckoned an excellent piece of sculpture.

The baths of Apollo are the work of Girardon, and are universally admired for their exquisite beauty. The principal groupe exhibits Apollo at the abode of Thetis, encircled by nymphs, who appear to serve him with the most anxious assiduity; while the horses of his car are represented in the act of drinking. When the fountains play, this groupe is rendered still more interesting by the brilliant and truly picturesque appearance of the water.

There are many other fountains, cascades, &c. the beauty of which can scarcely be described; but what is most admired, is the grand canal, sixteen hundred yards long, and sixty-four broad, at each end of which is a large bason of an octagonal figure, and in the middle it is intersected by another canal about two hundred and sixty yards in length. The Labyrinth is a fine grove, so called, because it is difficult to find the way out of it, the walks being curiously interwoven with each other. At the entrance are two statues, the one of Æsop, and the other of Cupid, holding a clue of thread in his hand, intimating to the stranger the necessity of such a guide to prevent his being lost in the many intricate windings of the place. The whole is adorned with statues and fountains, an

arly a bason of curious shell-work, wherein Æsop's fables is represented in the most na- manner.—The orangery, or green-house, is piece of architecture, consisting of several s, of which the largest is above four hun- et long, and thirty broad, and all of them with beautiful columns of the Tuscan order. his green-house is a fine parterre, with a in the middle of it, where the water is up to the height of forty feet; and the arterre is adorned with rows of columns, of figures, statues, vases, and other orna-

uld be going far beyond our bounds, to every thing worth observing in these de- gardens; but there is one particular more g than any we have yet noticed, viz. the whereby they are supplied with water Seine, which is four or five miles distant. done by a wonderful engine standing on a of that river, whose stream turns several heels, and works two hundred and twenty- ps; by which means the water is raised a tower upon a hill, above a hundred and yards higher than the river. From hence long an aqueduct of thirty-six arches, and yed through large pipes to the reservoirs of which was formerly a magnificent palace, been demolished by the blind rage of the nists. The water-machine, however, ts, and is well deserving the notice of tra- Louis XIV. had a design of convey- vater of the river Eure to Versailles, and gly caused prodigious works to be begun ntenon, in the year 1684, but they were ed on the breaking out of the war in

1688, and have been left unfinished. The magnificent aqueduct erected on this occasion, consisting of two hundred and forty-two arches, has been accounted the noblest in the world.

The chateau of St. Cloud, charmingly situated on the left bank of the Seine, and justly celebrated on account of the beauty of its waters, and the magnificence of its cascade, was first built by Monsieur, brother to Louis XIV. and greatly embellished by the late unfortunate king; but has been lately fitted up for the summer residence of the Chief Consul. It is said, that Barras, when at the head of the Directory, designed to take up his abode at this delightful place; and it is certain, that all the factions which have successively predominated in France, have been induced, from similar motives, to spare this palace, while many other magnificent edifices were delivered up to the mad fury of the populace.

The interior of the pavilion, looking toward the park, underwent some considerable alterations about two years before the French revolution, and the cieling was finely painted with representations from the opera of Armida: these have been destroyed by the iron hand of anarchy; but those on the cielings of the gallery of Apollo, the grand saloon, and the cabinet of Diana are fortunately preserved.

The gallery of Apollo consists of nine compartments, in the largest of which the sun, under the figure of Apollo, is represented quitting his palace, preceded by a beautiful infant, the symbol of abundance, and attended by the Hours. Aurora, seated in her car, is preceded by a cupid, in the act of scattering flowers; and above is the break of day, represented as a young man with a st

s head, and a rod in his hand, dispelling the clouds with which he is enveloped by Night, her attendants the slumber of life and that ath.

ie seasons are exhibited in the following man—Spring is emblematically represented by uptials of Zephyr and Flora; Summer, by an isite description of the festivals of Ceres; Au-, by the celebration of the feasts of Bacchus Ariadne; and Winter, by storms of hail and . In the latter piece, Boreas appears in the f repelling the sun, whilst the earth implores ssistance of that great luminary, and Vulcan s to the petitioner the resource of terrestrial

he windows at the extremity of the saloon as columns to the representation of mount assus; and in the circular gilded frame-work ight bass-reliefs, descriptive of various sub-in fabulous history.

ie gallery is terminated by the cabinet of a, where that goddess is represented at her , and the cieling is embellished with several ematical figures.

ior to the French revolution, the chapel was llished with a fine painting of the taking n from the cross; but this has shared the fate ny other scriptural pieces, which were ob-us to the sons of infidelity and rebellion.

the varied and picturesque scenery of the it is almost impossible to convey any satisfac-idea by a verbal description. The beauty reat abundance of the waters are extremely esting; and the great cascade must inevitably the admiration of every attentive observer. Its is ornamented with an assemblage of stones,

which emblematically represent a river-god and a nymph of the fountains; the sheets of water produced by these figures unite in falling into a large shell in the centre; while nine other sheets, which are supported by shell-work terraces, take a prodigious variety of forms, and mingle in a bason surrounded by a range of chandeliers.

In the lower part of the cascade, which is separated from the former by an alley, three distinct bodies of water fall successively into three basons, and finally into a canal, ornamented with several jets d'eau, and leaden figures of frogs, dolphins, &c.

The palace of Trianon, situated in the park of Versailles, is a small but elegant edifice, and is generally admired by strangers. Two wings, each of which is terminated by a beautiful pavilion, are united by a peristyle, consisting of twenty-two columns of the Ionic order; correspondent pilasters adorn the intermediate spaces between the windows; and the roof is terminated by an elegant ballustrade, and ornamented with vases and statues. The garden is laid out with great taste, the numerous *jets d'eau* produce a fine effect; and the basons are decorated with groupes of figures by the best masters.

Little Trianon is situated at a small distance from the above-mentioned palace, and consists of a square pavilion, in the Roman style of architecture. The fronts are embellished with Corinthian architecture, and crowned by a ballustrade. The gardens are extremely beautiful, and in that called the English garden there are several picturesque views, in which nature has been so successfully imitated, that the spectator frequently loses sight of the art which has been employed, and when

perceives it, it is only to receive additional
asure from the illusion of a truly charming land-
pe.

At St. Germain-en-Laye, about twelve miles
st of Paris, is an ancient chateau, which was,
a long time, a hunting-seat of the kings of
nce. It was originally founded by Charles V.
370, and enlarged by Henry IV. who extend-
and improved the gardens at a prodigious ex-
ice. Louis XIII. also made several additions
his palace; and Louis XIV. augmented the
buildings with five large pavilions. James II.
England, resided in this palace for a consider-
e time, and here he died in the year 1700.

bout three miles east of Paris is a palace of great
iquity, called Vincennes, and situated in an ex-
sive forest of the same name. The buildings,
ich were successively improved by Francis I.
nry II. Louis XIII. and Louis XIV. form a quad-
gle, surrounded with deep dry ditches. A
t of this edifice, called the Castle, served as a
e prison from 1472 to 1784, and consists of
eral square towers, to which there is an en-
ce over a drawbridge. The chapel is a fine
hic structure, decorated with several pyramids
other ornaments, and the cielings of some of
apartments are enriched with good paintings.
gate of the park, fronting the castle, is a
dsome piece of architecture, in the form of a
mphal arch, adorned with columns and statues,
on each side of it is a row of buildings with an
n gallery, supported by rustic arches.

The palace of Meuden stands in the middle of a
st, about five miles to the south-east of Paris,
has a noble avenue leading to it three quar-
of a mile in length. At the entrance of the

court is a large pile of buildings on the right, and another on the left, which open in the form of a semicircle, but are disjoined from the body of the house. In the middle of the front is a lofty advanced building, entered by three doors, and above it runs an order of architecture, consisting of arches and columns finely designed. Above them is another order, accompanied with pilasters. The wings are not so high as the principal building, and each of them is terminated by a square pavilion. The front, towards the garden, also consists of a lofty advanced building, with wings considerably lower, which terminate on the right and left in two pavilions of the same height as the body of the building. The gardens are much admired for their fine walks and parterres, and adjoining to them is a spacious park, encompassed with a brick wall, and adorned with woods, basons and reservoirs of water. The chateau itself was also formerly adorned with a fine collection of paintings, statues, and other curiosities; but it has been recently converted into barracks for the artillery, and has consequently lost many of its beauties and decorations.

The Pantheon at Paris is a superb and elegant structure, designed to preserve the ashes of those illustrious characters who have rendered an essential service to their country, by their writings or exploits. This majestic edifice has a very fine peristyle, composed of twenty-two lofty Corinthian columns; the dome exhibits a sort of circular temple, supported by a series of pillars, each *fifty-four* feet high, surrounded with a terah, and *bordered* with an iron ballustrade. The cupola is *encompassed* with a salient colonnade, and sur-

pedestal, on which is to be placed a colos-
lue of Fame.

interior of this edifice consists of four
decorated with one hundred and thirty
hian columns, and supporting an entabla-
hich serves as a base for the lofty tribunes,
ed with handsome ballustrades. The li-
belonging to this noble building consists of
ousand manuscripts, and upwards of twenty
nd printed volumes.

Hospital of Invalids, formerly called the
Hospital of Disabled Soldiers, was founded
1, by Louis XIV. and is justly entitled to
armest admiration. It is a square stone
ng, situated on the bank of the Seine, almost
ite to the Thuilleries, and consisting of four
courts of the same form, surrounded with re-
buildings four stories high. These courts
nd a fifth, which is as large as all the other,
encompassed with narrow galleries, below
are several large wards, ornamented with
l fine paintings. In the lofty and magnificent
entitled the Temple of Mars, are display-
prodigious number of standards which have
won by France in various ages; but it is said,
nly *two* British flags are to be seen among
eds of trophies which adorn this hall of vic-
The floor under the dome is formed of tes-
d marble, and exquisitely finished. The
ns and offices are remarkably large, neat,
ommodious; and the place, taken altogether,
rs to be a very comfortable asylum for
wounded and superannuated soldiers who
long hazarded their lives in the service of
ountry.

by two pedestals that surround them, v
their projectures like rows of steps or
lowermost projecting most, the others
grees. Above these are several sm
which divide the feet of the great ones
as low as the plane of the uppermo
As the Rhone is a very rapid river, th
admirably contrived to withstand its vi
the unequal juttings of the pedestals
dually to break the force of the st
when the flood swells so high as to
(which it frequently does), the small
openings in the piers give a free pa
water, which might otherwise endan
bric. Besides the bridge is not strai
in several places, forming unequal ang
are greatest where the current is stro
thereby its fury is opposed and bro
Smollet, mentioning this bridge, observ
a great curiosity from its length, and the

ıg, and seventy-two feet broad, of which rriage-way is thirty feet, and the rest is p by a foot-path raised on each side. Over er is a semicircular parapet, round which s a cornice, resting on large consoles, and l with busts.

Pont de Neuilly, of Bridge of Neuilly, is ly considered as one of the finest pieces of ɔture in France, both on account of the ɛss of its construction and the hardiness of ɔution. It is perfectly horizontal, being eight hundred feet long, and consisting of ɛhes, the vaults of which are depressed in tre, having an opening of one hundred and eet, and a height of about thirty-two feet h the key-stone.

Bridge of Boats, at Rouen, built in lieu of gnificent stone bridge erected there by the ıs, is mentioned by a modern writer as one of atest wonders of the present age. It is nine hundred feet long; paved with stone,) firm, that horses and carriages with the it burthens pass over it in perfect safety, gh there are no rails on either side. It floats, and rises with the tide, or as the aters fill the river. The boats are admira- ɔored with strong chains, and the whole is ıtly repaired, though now very old.

ARTS, MANUFACTURES, INVENTIONS, &c.

THE care and application of the French ministers to promote the manufactories of their country, and turn every article of their commerce to the national advantage, is very remarkable, and worthy of imitation. It was M. Colbert, that great encourager of the mechanical as well as liberal arts, who prevailed with Louis XIV. to establish the manufactory of the Gobelins, at Paris, for the making of tapestry and other furniture for the use of the crown. The Louvre, the Thuilleries, and other royal palaces being completed under the direction of that minister, he began to think of making furniture suitable to the grandeur of those buildings, and with this view he assembled the ablest workmen from all parts of the kingdom, particularly painters, tapestry-makers, sculptors, goldsmiths, embroiderers, &c. and by offers of money, pensions, and privileges, he invited others from foreign nations. Having persuaded the king to purchase the house of the Gobelins, for them to work in, he drew up a system of laws for their regulation and encouragement, one of which prohibited the importation of tapestry from any other country. Ever since this manufactory was set on foot, it has been the most celebrated of the kind in Europe, having produced such a quantity of the finest work, and such a number of excellent workmen, as is almost incredible; and, in effect, the present flourishing condition of the arts and manufactures of France is in a great measure owing to this establishment. Their [illegible]lory is their tapestry, which they ha[illegible]

a degree of perfection not inferior to
s anciently done by the English and Fle-
he battles of Alexander, the four seasons,
pal actions of Louis XIV. done from the
f M. Le Brun, with other fine pieces
s manufactory has produced, were for-
sidered as the noblest ornaments of the
ces. The number of workmen now em-
t this manufactory, amounts to about
ut their beautiful works are too dear for
nes of the day; and they appear to gain
r subsistence.

ench have also considerable manufacto-
pestry at Aubusson, Felletin, and Beau-
at Arras, in Artois, they are noted for
tapestries, commonly called Arras hang-
of all the Flemish manufactories, those
s and Antwerp are the best, where they
onderfully either in human figures, in ani-
ndscapes, and that both with respect to
nanship and the design.

are two kinds of tapestry: one of the
, the other of the low warp; though
nce is rather in the manner of working
e work itself, the looms of the former
ight, whereas those of the latter are flat,
to the horizon. The loom for tapestry
warp consists of four principal pieces,
upright planks or cheeks, and two thick
rollers placed across them, the one at
other at bottom about a foot from the
The warp, which is a sort of worsted
woollen thread, is wound on the upper
the work, as fast as it is wove, is wound
er. When the loom is mounted with
e pattern or design to be represented

of it from time to time as the worl
Every thing being prepared, the work
himself on the wrong side of the piece,
broach or shuttle passes the silk, worste
materials of the woof between the th
warp, which he brings across each oth
fingers, and strikes the woof close w
of wood or ivory. Thus he proceeds
his colours according to his pattern, ar
then going to the other side of the loc
his work, and correct the contours b
them closer with a needle, if there b
But as this mode was extremely tedio
Blon contrived a new way of weavin
in the loom, with a draw-boy, whic
performed almost as expeditiously as
cades; for when the loom is once set
ed, any common draught-weaver, thou
quainted with drawing or painting, a
knowing what figure he is about, exactl

, consisting of two strong pieces of wood
ch form the sides, and bear a roller at each
on the farthest of which the warp is wound,
the work, as it advances, on the nearer. The
gn or painting to be imitated by the workman
aced underneath the warp, so that he can see
figures through it; and being seated on a
h before the loom, he takes a flute, as it is
d, which does the office of a shuttle, mounted
silk or worsted of such a colour as his piece
ires, and having passed it among the threads
e warp, which he raises or lowers by means
eddles, &c. he beats the woof close with the
or comb, which has usually teeth on each
and is made of wood or ivory as above men-
d. One thing is very remarkable in the
ving of tapestry, viz. that it is all wrought
the wrong side towards the workman, who
is last method of working does not see the
side of his piece till it be finished and taken
e loom.

mongst the other manufactures of France, that
lk is the most considerable, though not so
shing as it has been formerly. When the
ufactures of Lyons were in their greatest pros-
y, it was computed that eighteen thousand
s were employed in weaving silks in that city
its neighbourhood; but in the year 1698 the
ber was reduced to about four thousand.
s, however, is still noted for its silk manufac-
, particularly its taffeties, which are remark-
for their fine lustre. Octavio May, of
s, is said to have first discovered the method
ving taffeties this beautiful gloss, the occasion
ich is thus related:—Being one day musing
recent misfortunes, he happened to have t

his mouth some hairs of silk, which he kept chewing till his reverie was over. Upon spitting out the silk, it seemed to shine, which engaged his attention, and led him to reflect on the reason. After much contemplation, he concluded that the lustre of the silk must proceed, first, from his having pressed it between his teeth; secondly, from its being wet with his saliva, which had something glutinous in it; and thirdly, from its having been heated by the natural warmth of his mouth. By a proper use of these observations, he found out the means of producing the same effect upon the next taffeties he made, and thereby soon acquired vast riches to himself; and to the city of Lyons the reputation of giving a better gloss to taffeties than any other city in Europe.

The machine invented by Octavio for this purpose resembles a silk-loom, having a beam at each extremity, between which the taffety is stretched, to take the gloss or lustre. This is given by rubbing it gently with a liquid preparation, as it is rolled from one beam to the other, whilst at the same time it is dried by a charcoal fire, placed on a carriage underneath it. The gloss is given to black taffeties by beer and orange-juice boiled together; but for coloured taffeties, they use gourd-water distilled in an alembic.

Within less than a century past, the French have greatly improved their woollen manufacture, which is chiefly owing to the instructions of foreigners who have settled amongst them, and the clandestine exportation of wool from England. In the year 1665, Mr. Van Robets, a Dutchman, set up a manufactory of woollen cloth at Abbe

In Picardy, which succeeded so well, that loths made there are said to be little inferior ose of England or Holland. Louis XIV. great encouragement to this manufactory, ing Robets and his people several privileges, particularly the liberty of importing what- was necessary for their purpose, without g any duty.—Abbeville is also considerable ts manufactures of linen, sail-cloth, soap, re-arms.—And having mentioned linen, we not forget the curious manufacture of fine , called cambric, from Cambray, the capital province in the French Netherlands, which dly to be equalled in any part of Europe.

wards the end of the seventeenth century, rench made a great improvement in the glass facture, by inventing a method to cast very plates, till then unknown, and scarcely prac- yet by any but themselves and the English. nvention is owing to the Sieur Abraham art, who first proposed it to the court of e, in 1688, where he met with deserved en- gement. By this method, which is some- like the casting of sheet-lead among bers, they are not only enabled to make g-glass-plates of more than double the di- ons of those made the Venetian way of ng, but also to cast all sorts of mouldings, rs, and other ornaments. The chief manu- y of this kind in France is at the castle of obin, three leagues from Laon, where the r of furnaces, forges, work-houses for , carpenters, &c. together with apartments se and other workmen employed about the appear more like a town than a manufac-

The melting-furnaces used in this manufacture are of a vast size, and those for annealing the glasses when formed are still larger. Round a melting-furnace there are at least twenty-four annealing furnaces or ovens, which are called carquasses, each having two tissarts or apertures to throw in the fuel, and two chimnies; and besides these, there are furnaces for making frit*, and calcining old pieces of glass. The inside of the furnaces is made of a sort of earth that is able to sustain the action of the fire, and the melting-pots and cisterns are made of the same. These pots are as large as hogsheads, containing above two thousand weight of metal; so the workmen call the melted matter of which the glasses are formed. The cisterns are much smaller, and serve for the conveyance of the liquid glass, which is taken out of the pots, to the casting-table. Such is the violence of the fire, that the furnaces are repaired every six months, and seldom last longer than three years, being then rebuilt from top to bottom.—When the furnace is heated to a proper degree, they fill the pots with materials, which is done at several times, to facilitate the fusion; and when the matter is melted, settled, and refined, which is commonly in four-and-twenty hours, they fill the cisterns with it in the same furnace, where they let them remain about six hours longer, till they appear white with the excessive heat. By means of pullies and a large iron chain, the cisterns are then raised out of the furnace, and placed upon a sort of carriage, by they are conducted to the table where is to be run. This table or mould is of

* ame given to the ingredients wherent glass is t
de, when calcined or baked in a furnace.

t-metal, about nine feet long, and broad in pro-
rtion, having iron rims or rulers on the edges of
which being moveable, so as to be set closer
farther apart at pleasure, determine the width
the glasses. Upon these rulers rest the ex-
mities of a brass roller, by means of which the
rning liquid, when poured upon the table from
e cistern, is equally spread from one end to the
her, and rendered of an uniform thickness.
hen the glass is come to a proper consistence,
ey shove it off into the annealing furnace; and
continue casting other plates till the pots of me-
l are exhausted, removing the table from one
nealing furnace to another, as fast as they are
ed, where the plates remain, till by the gradual
crease of the heat they are equally consolidated
every part. It is really surprising to behold
ith what quickness and address the workmen
through this dangerous business, how they
se the cisterns full of flaming matter out of the
rnace, convey them to the table, pour out the
ry torrent, spread the glass, &c. In short, the
hole is inconceivable to such as have not been
e-witnesses of this wonderful manufacture.

The materials used in the composition of glass
e salt, and sand, or stone. The salt is of the
ed kind, such as will not evaporate with the
st intense heat, and is procured chiefly from
e ashes of a plant called kali, glass-weed, or
t-wort, which grows plentifully in Egypt and
ia, and also on the coasts of Provence and
nguedoc. The salt extracted from the ashes
a species of kali growing about Alicant in Spain
reckoned the best, and is used in making the
te-glass here described. The ashes of fern also
ld a salt that makes excellent glass; and those

of bean stalks, coleworts, brambles, rushes, and many other plants, may be used for the same purpose. As to stone, the other ingredient in glass, the best is that which will easily melt, is white, and transparent; and this is found principally in Italy, being a sort of marble called Tarso. Nothing indeed makes finer or clearer glass than flint, but it is seldom used because of the charge of preparing it. The preparation necessary for stone is to calcine powder, and sift it; but where proper stone cannot be had, sand is used, which is to be well washed, and needs no other preparation.

The manner of heating the furnaces is so singular, that it deserves to be particularly mentioned. The person employed in doing it runs round the furnace as fast as he is able, throwing into each aperture, as he goes along, a billet or piece of wood cut for that purpose; and this course he continues for a certain number of hours, at the end of which he is relieved by another. This constant and regular supply of fuel keeps the furnace to a proper degree of heat, which is such, that a large bar of iron laid at one of its mouths becomes red hot in less than half a minute. It is computed, that one of the melting furnaces, before it is fit to run glass, costs above three thousand five hundred pounds; that three months are required to repair it, and six to build it anew; and that when a pot of metal bursts in the furnace, the loss of matter and time is more than two hundred and fifty pounds.

As we are now speaking of glass, it may be proper to take notice of one of its most remarkable properties, viz. its ductility, for it may be drawn or spun out into long threads, to an astonishing degree of fineness. In the spinning of

two operators are employed, one of whom
the melted metal over a lamp, from which
her draws a thread with a hook, and having
ed it on the rim of a wheel, he turns it
y round till he has spun out the mass from
ce the thread is drawn. Thus this brittle
r becomes flexible in proportion to its fine-
and the threads may be spun as small as
f a silk-worm, or even those of a spider's.

is naturally leads us to consider the amazing
ity of gold, which exceeds that of all other
s, of which the gold-beaters and gold-wire-
ers furnish us with abundant proof, and per-
none are more curious in these works than
rench artificers, or have made nicer obser-
as on this subject than the philosophers of
nation. — A gold-beater, having melted a
ity of fine gold, beats it on his anvil into a
as thin as paper, and then cuts it with his
s into little pieces about an inch square. These
its between the leaves of a vellum book, and
a hammer beats them on a marble block,
hey are considerably stretched. He then
them out, cuts them in four, and puts them
nother book, to be farther extended. When
are brought to a certain degree of fineness,
ire again cut into four, and made to under-
e same hammering in two other books,
, as well as the former, are called moulds;
e leaves of these, instead of vellum, are made
t-guts, well scoured, and prepared for that
se. The leaves of gold, being beaten to the
ess required, which is greater or less, accord-
the use it is intended for, are disposed in
paper-books, prepared with red bole for

gold to stick to, and thus are kept for sale.—By this operation, an ounce of gold is beat into a surface of one hundred and forty-six square feet; and it has been computed, that the thinnest parts of some gold leaves are scarcely one 360,000th part of an inch thick.

But the distension of gold under the hammer is far short of what it undergoes in the drawing-iron. What we call gold-wire is made of a cylindrical ingot of silver, usually about two feet long, and two or three inches round, which being covered with leaf-gold, is successively drawn through the holes of several irons, each smaller than the other, till it becomes finer than a hair. The ingot passes through a hundred and forty or fifty holes, before it is brought to its utmost fineness, every new hole lessening its diameter; but then it gains in length what it loses in thickness, and consequently increases in surface: yet the thin covering of gold still follows the silver in all its extension, and never leaves the minutest part bare, even to the microscope. M. Reaumur, who has been very curious in his calculations relating to the ductility of gold, observes, that an ingot or roll of silver weighing thirty pounds, about an inch and a half diameter, and twenty-two inches long, is usually covered over by the wire-drawers with two ounces of leaf gold, and sometimes with little more than one; so that the thickness of the gold seldom exceeds a five-hundredth part of an inch, and sometimes not a thousandth. The same ingenious gentleman found, by exact weighing, and the most accurate computation, that an ounce of *the fine wire* drawn from such an ingot, covered *with two* ounces of gold, was three thousand two hundred and thirty-two feet long, and con-

the whole ingot, one million one hundred
ee thousand five hundred and twenty feet,
easure, which are equal to one million two
d and sixty-four thousand four hundred Eng-
, or two hundred and forty-miles. But this is
; for the greatest part of our gold-wire is
r wound on silk, in order to which it is
flat between two rollers of well polished
nd by this pressure it is lengthened above
enth; so that instead of two hundred and
iles we may now reckon two hundred and
-four. The breadth of this thin lamina, or
vire, is a ninety-sixth part of an inch; and
ulation it appears, that the ounce of gold
spread into a surface of one thousand one
l and ninety square feet, whereas, by the
ater's hammer, it is only extended to one
l and forty-six.—How inconceivably thin
e gold be in this prodigious extension!
umur found it to be a two million one
thousandth part of an inch; butthis com-
supposes the thickness of the gold to
y where equal, which is not the case,
leaves being thinner in some places than
he gilding on the wire will be so like-
nd therefore that gentleman computes the
here thinnest, to be only a three mil-
hundred and fifty thousandth part of an
t this is not the utmost ductility that gold
le of; for if instead of two ounces to the
pon which this computation is founded,)
were used, the thickness of the gold
en be no more than the six million three
t'.ousandth part of an inch in the thinnest.
As amazing as this appears, the gold
be reduced to more excessive thinness.

by repeating the pressure between the steel rollers, and yet remain a perfect covering for the silver, so that the best eye, even assisted by a microscope, cannot discern the least chasm or discontinuity.

Before we take leave of France, it may be necessary to give some account of the sea-salt made in that country, which yields a vast revenue, and is a very considerable article of commerce, more being made there than in all Europe, or perhaps in all the world besides. There are two kinds of this salt; the one which receives its consistence from the heat of the sun, called bay salt from its brownish colour; the other called white salt, which is boiled over a furnace. The first manner of preparation is used where the sea coast is flat and low, the latter where it rises in downs or hills of sand. The most noted coasts for bay salt are those of Britanny, Saintonge, and Aunis, especially the first, there being reckoned in the bay of Bourgneuf alone above twenty thousand salt works. The white salt is made chiefly on the coasts of Normandy.—The manner of making bay salt is by letting the sea-water into several square pits or basons, the bottoms whereof are well rammed, and have a communication with each other by little channels, through which the water is admitted to the height of five or six inches, after having rested two or three days in larger and deeper reservoirs, and then the sluices being shut, the work is left to the wind and sun.

The season for this business is usually from the middle of May to the end of August, when the sun's rays being strongest, the salt is best raised and crystallized. The water at first thickens imperceptibly, and at length becomes covered with

in crust, which hardening by the continuance
ne heat, is wholly converted into salt. This
t being broke with poles or rakes, the flakes
alt fall to the bottom of the water, which is
found to be exceedingly hot. The flakes be-
raked out, are left for some time in heaps
it the edge of the pit, till they are completely
and fit to be pulverized. And this brown
is usually sold without any farther prepara-
, though in some places it is refined by boiling
n large caldrons. The white salt of Nor-
idy, however, is not made by refining the bay
but is extracted from a muddy sand on the
of the shore, which the tide every day covers,
impregnates with its waters. This sand is
iered and removed into pits, where the wa-
lrains from it through straw laid at the bottom,
runs into vessels set to receive it. Of this wa-
the salt is made by boiling it, after which it
ds in baskets to purify, where it drains itself
he moisture that remained, and when dry is
ied to the magazines.

Great quantities of sea salt are exported from
nce in time of peace by the English and Dutch,
, when at war with the French, endeavour to
ply themselves from Spain and Portugal; but
salts of these countries have a disagreeable
pness, and are not so fit for salting flesh or
as those of France, unless they are softened
corrected. The salt of Guerande in Britanny
eferred by the English as the best and whitest;
that of Bourgneuf, though browner and hea-
, is most used in France, and also throughout
Baltic, particularly in Poland, where they use
manure the ground which it warms, and
rves the grain from being gnawed by vermin

d yet we do not find that it sufficient
he purpose for which it was intende
umber of sluices rendering the navig
oth tedious and expensive.
re several other works of this kind
hich, by uniting the navigable river
at advantage to the inland trade of t
The canals of Briare and Orleans, ne
of Languedoc, are the most remarkabl
several sluices like those already describe
By these canals a unication is opened b
tween the Seine an Loire, whereby Paris
furnished with the p ons of the interior pa
of the kingdom, as as the merchandise
Nantes in Britanny, a reciprocal traffic
easily carried on between the northern a
southern provinces.

Having mentioned Nantes, it seems proper
take notice of its excellent brandy, especially
that liquor makes no inconsiderable article in t
French commerce. The brandies of Nantes a
Cognac are esteemed the best in France, bei
of a more pleasant flavor, finer and stronger th
any of the rest. The best brandy is that which
white, clear, of a good taste, and will bear t
test or proof, *i. e.* upon pouring it into a gla
a little froth will be formed at the top of it, whi
as it diminishes, makes a circle, called by t
French merchants the chaplet, and by the Engl
the bead, or bubble, there being no brandy b
what is well dephlegmated, so as to retain no s
perfluous humidity, whereon the bead will be
irely formed.

A great number of foreign vessels return fr
ports of France chiefly laden with bran
ugh the Dutch take off almost as much a

[redacted]. It is computed that nearly two [redacted] thousand gallons are annually exported [redacted] city of Nantes alone, and above twice [redacted] from Bourdeaux. With respect to [redacted] of France, their reputation is well ; and as we have already described the of making them, we shall only add, that their vast consumption at home, great [redacted] are exported to other countries.

CHAP. III.

OF SPAIN AND PORTUGAL.

Springs, Caves, Lakes, &c.

SPAIN is sep[arated] nce by a long chain of very high [mountains] lled the Pyrenees, which reaches fr[om the Bay] f Biscay to the Mediterranean; and fr[om] ge several branches extend themselves [over] great part of the kingdom. These m[ountains] send forth a vast number of springs, w[hich] m many fine rivers that water the plains and valleys, and render them fertile and delightful. The mountains of Andalusia and Granada are also remarkable for a great variety of medicinal waters, whose healing virtues many have experienced. Of the hot kind, the most famous are those of Seville, Cordova, and Granada, which are said to cure all chronical diseases; and this is not improbable, considering the minerals they are impregnated with, their excessive heat, and the plentiful perspiration occasioned thereby, as well as by the warmth of the climate.—Nor is Portugal without these salutiferous fountains, having some of a hot, and others of a cold nature. One in particular of the former [kind], about forty miles north of Lisbon, is much [fre]quented to, where an hospital has been built for the reception of poor patients, who are attended by a physician, apothecary, surgeon, and other attendants. The hot bath of St. Peter, in Algarve

o reckoned of great virtue, and some others
e northern parts of the kingdom.
he neighbourhood of Antequera near Granada
veral remarkable caves, supposed to be mines
rly worked by the Romans, and exhausted of
precious metals.—Another rarity near Anti-
, is a parcel of high rocks, which, at a dis-
, look like men, beasts, buildings, &c. and
ckoned a wonderful work of nature.
the top of a ridge of mountains in Portugal,
l Estrella, there are two lakes of a great ex-
and depth, especially one of them, which
d to be unfathomable. What is chiefly re-
able in them is, that they are calm when the
so, and rough when that is stormy; which
s it probable that they have a subterraneous
nunication with the ocean; and this seems to
nfirmed by the pieces of ships they occa-
lly throw up, though almost forty miles dis-
from the sea.—There is another extraordi-
lake in this country, which, before a storm,
d to make a frightful rumbling noise, that
be heard at the distance of several miles.—
we are also told of a pool or fountain, called
nças, about twenty-four miles from Coim-
that absorbs not only wood, but even the
st bodies thrown into it, such as cork, straws,
ers, &c. which sink to the bottom, and are
no more.—To these we may add a remark-
spring near Estremus, which petrifies wood,
ther encrusts it with a case of stone; but the
surprising circumstance is, that it throws up
r enough in summer to turn several mills,
eas in winter it is perfectly dry.
e river Guadiana, about eight leagues from
ince, entirely loses itself under ground, and

after a subterraneous course of seven or eig
leagues, rises again in a lake near the village
Daimiel. From hence it takes the name of Gu
diana, and in its course sinks twice under groun
again before it falls into the ocean.

MINERALS, FOSSILS, &c.

SPAIN and Portugal abound with mountain
whose bowels are furnished with a vast stor
of metals and minerals, particularly iron, co
per, lead, quicksilver, alum, and calamine; t
gether with quarries of marble, agate, granat
jasper, and other precious stones. As to the
mines of gold and silver, they have been eith
exhausted by the Romans, Carthaginians, ar
other nations, or at least quite neglected by t
Spaniards, since they have been able to dra
such vast quantities of those rich metals out
their American dominions. Of all the mines
Spain, therefore, those are the most valuab
which furnish them with iron and quicksilver,
both which they have great plenty. Their iron
excellent, particularly that which is dug out of t
mountains of Biscay, whereof large quantities a
ent to most parts of Europe. Some persons a
of opinion that the Spanish iron is the best in t
world, but the Swedish iron has generally t
preference, because the former is apt to red-sea
or to crack between hot and cold.

Quicksilver, or mercury, is a mineral flui
ter, cold to the touch, of a shining silver c
very heavy, volatile, and apt to unite wit

hall, especially gold, to which it adheres
ily. It is sometimes found in its fluid
the bowels of the earth, and is then
irgin mercury; but it is more usually
hard and stony glebes, of a yellow, or
colour; or else in form of a red sulphu-
neral, called cinnabar. To separate the
from the ore or earth, the usual way is
the glebe to powder, mix it with water,
it briskly about till the water becomes
ck and turbid. When it has stood some
settle, the water is changed and worked
s before; and this is repeated, till at
he water comes away perfectly clear,
he mercury and other metallic and stony
t the bottom of the vessel. To this mat-
scoria of iron is added and distilled in
orts, by which the mercury is separated
the heterogeneous parts.

gate, which is frequently found in Spain,
cious stone, partly opake, and partly
ent, diversified with various colours
and spots, which sometimes represent
nimals, fruits, flowers, and other natural

There are various kinds of agates,
ave different names, according to their
and degrees of transparency; of which
lian and sardonyx are the most valuable.
ate, especially the sardian or cornelian,
ays been esteemed for seals, being a stone
ves well, and takes a fine polish. Several
al virtues have been ascribed to this stone,
e seem to be imaginary.

granate, or garnet, as it is commonly
s a gem of a red colour, resembling that
ernel of a pomegranate, from whence it

sea-salt, only it i
of an iron and
qualities of the
the rest by the
which gives it
fourth sort, th
crystal, which
druggists. Th
the fire, like
The druggists
they take care

BESIDE
of Spain a
ed with s
timber of
that serve
goats, an
relish; a
abundan
grows
yields
quor, th
been a
And as
only a
Englan
art ca
An
tree,

country, wearing a continual verdure, and b
ing, at the same time, a fragrant bloom of flow
and a diversity of fruits, some in their infant s
and others in their full maturity. The fruit and
tree are too well known to require a particula
scription; but it may be proper to observe tha
orange-tree is one of the most long-lived p
in nature, several of them having been ke
gardens between two and three hundred y
and even then retained the appearance of c
derable vigor. The most delicious sort, c
China oranges, were first brought from Chir
the Portuguese; and it is said the very tree,
whence all the European ones of that kind
been propagated, is still preserved at Li
The city of Seville in Spain gives name to a
cies of oranges whose juice has an agreeable
dity, and is chiefly used in punch and sa
The lemon-tree, whose acid fruit is used fo
same purposes as the Seville orange, is like
the produce of this country.

The pomegranate-tree, which bears a fine
dicinal fruit, grows plentifully in Spain and
tugal, both wild and cultivated in gardens. T
are two kinds, the one bearing flowers only
other both flowers and fruit; the branches
little prickly, and the leaves resemble tho
the greater myrtle. The flowers are enclos
a purple calyx or cup, shaped like a bell;
the fruit consists of a great number of an
grains or seeds, enclosed within a reddish
and covered with a thick brownish rind.
this grows a sort of crowning, of the same n
with the rind, formed of a production of
calyx. Pomegranates are not only agreeab
the palate, but good for the stomach; and

as well as the rind and kernels, are of con-
e use in medicine, being all remarkably
and astringent.

almond-tree deserves to be mentioned
he spontaneous productions of Spain and
, though not peculiar to their soil; being
nd in France, Italy, Barbary, and other
ountries. It greatly resembles a peach-
ossoms early in the spring, and the fruit
bout August. The flowers are pentape-
. e. consist of five leaves, ranged in the
nner; and the pistil becomes a fleshy fruit,
ng a seed or kernel enclosed in a stone,
the almond, and which drops out when
is arrived at maturity. Almonds are of
ds, sweet and bitter; the former of which
soft grateful taste, and are reputed cool-
ling, emollient, and nutritive. The oil
rom them is a safe and useful remedy in
c pains; and in hoarseness, coughs, asth-
d all disorders of the breast. The latter
seldom eaten, on account of their bitter-
t they afford a proper medicine on many
s, being of a stimulating, detergent, and
t quality.

it may be proper to take notice of an
een, of the oak kind, which is commonly
n Spain, remarkable for a sort of husk or
alled kermes, and scarlet grain, which ad-
metimes to its leaves, but generally to its
branches. It is of a spherical figure, as
s a pea, smooth, shining, and full of a
inous juice of a beautiful red colour, of
rable use in medicine, and in dying scarlet.
he most diligent enquiries of naturalists into
duction of this grain, it is found to be the

little flies, so minute, that they ar
cernible, insomuch that the whol
stance seems converted into these i
vent which, the kermes is usually s
gar. The berries are of a vinous s
rough bitter taste, which indicates
rating quality, and their fitness to c
cent humors. They yield abunda
salt, which probably might have a
medicine, if taken in a liquid, than
in conserves and confections, wh
action.

ANIMALS.

ONE of the most remarkable ani
and Portugal, is the Buffalo, or wi
characters of the genus are well kn

ır, and intorted: they are very thick at the
, but sharp at the point. The neck is thick,
remarkably short; the flesh hangs loosely un-
the throat; the body is more bulky in pro-
on than in our bull; and the legs are thicker,
ıbout equal in length. The colour is usually
ckish grey, but in this there is a great vari-
ı; there is usually some white under the belly,
ıbout the forehead. The buffalo is originally
ive of the East, but has been introduced into
: parts of Europe, where it is kept for service.
ıme places it is a beast of burden, and the milk
ıe females is used as that of our cows. But it
ɔt to be mischievous, and cannot be safely
ed loose in a field where people walk.

ıe wild boar is also a native of these king-
ı; and being no other than the common hog
wild state, a description of it may appear
fluous; though the creature in its native wild-
is often, in many respects, unlike those of
ame species, which are kept about our houses,
ıch indeed that authors have distinguished
ild hog and the tame one as distinct species.
generical characters of the genus are as fol-
the upper teeth are convergent, and four in
er; those of the lower jaw are eight, and
atulous; the canine teeth of the upper jaw
vo, and remarkably short; those of the under
ıre single, and exerted: the crown of the
is carinated, and the hoof divided.

e wild hog is fond of mountainous places, and
ally lives in thick woods; its body is covered
two kinds of hair, a longer and a shorter,
more distinguishable than in the tame hog.

e *Spanish* sheep, particularly about Segovia,
tly famous for the fineness of their wool,

of a middle nature between its parent
that account incapable of propagating i

Mules are chiefly used in rocky an
ous countries, as about the Alps, Py
They are usually strong, well-limbed,
being mostly bred out of the fine Sp
and are sometimes fifteen or sixteen
No creatures are so proper for car
burdens, and none so sure-footed.
much stronger for draught than our h
will travel several months together
eight hundred weight upon their b
will live and work twice the age of a h

The cantharides is a native of Spai
is usually known in England by the n
Spanish fly, though the insect is
France and Italy. It is a genus of

rds produced the cantharides, as butterflies are m caterpillars. Being taken and suspended er the fumes of vinegar, they are exposed to sun to dry, and then sold to the druggist.

ANTIQUITIES.

AS the Romans were a long time masters of in, the remains of their ancient structures are be seen in several parts of the kingdom.—There magnificent bridge over the Tagus, at Alcan-a, which was built in the reign of the emperor ajan, and consists of no more than six arches, ugh it is upwards of six hundred feet in length; height is said to be two hundred feet above the ter.

In the road from Tarragona to Barcelona, is tomb of the Scipios, which is a base of an elisk, or pyramid, anciently erected to their mory, with a figure on each side in the Roman bit; these are by some persons thought to be de-ned for the two Scipios, but others suppose m to represent weeping slaves. At a small tance is a noble triumphal arch, erected by the ily of the Licinii, adorned with fluted Corin-an columns, and a pediment with Dentiles, like Ionic order.

At Merida, amongst other remains of antiquity, re is yet standing great part of a triumphal arch, led by the inhabitants Arco de St. Jago. And Tarragona may be seen the ruins of some an-nt Roman structures, particularly of an amphi-atre, which has furnished materials for building

a neighbouring church. Several other [illegible] ancient grandeur are to be met with in a[illegible] the city; but it is probably owing to the [illegible] tions of the Moors, that we do not find [illegible] monuments of antiquity in Spain as might [illegible] be expected.

BUILDINGS.

AMONGST the cathedral churches [illegible] that of Toledo seems to claim the first noti[illegible] one of the noblest and richest in the univ[illegible] is built of beautiful white stone, curiousl[illegible] and in the finest style: it is three hun[illegible] eighty-four feet in length, one hundred a[illegible] in breadth, and one hundred and seven i[illegible] Its lofty roof is supported by eighty-eigh[illegible] columns, which divide it into three spacio[illegible] of which the central one is extremely g[illegible] majestic. Eight large and beautiful gates [illegible] magnificent portices, lead into th[illegible] [illegible] over which is a very high tower, [illegible] [illegible] of bells and commanding an e[illegible] [illegible] over the neighbouring country. T[illegible] [illegible] is adorned with the fines[illegible] [illegible] and gilding that can possibly be i[illegible] [illegible] with costly iron gates fixed [illegible] [illegible] On each side of the altar is [illegible] supported by pillars of the sam[illegible] The choir of the canons is enclosed in [illegible] [illegible] and enriched with the most curi[illegible] [illegible] wood and jasper. Both these ch[illegible] [illegible] on the outside with statues and [illegible] [illegible] imagery, representing several [illegible] [illegible] history.—As to the chapels [illegible]

, of which there are a great number, it is
ible to describe their beauty and riches, or
e monuments of the kings, prelates, and
llustrious persons whose remains are there
ed. The principal chapel, called the Sa-
wherein the treasure of the church is kept,
with jasper from the pavement to the roof;
altar is encompassed with a fine ballustrade
r. The image of the Virgin, as large as life,
f silver; and round the altar hang a series of
of the same metal. Forty large closets are
ed in the wall, which are filled with a pro-
quantity of gold and silver vessels, and other
, such as basons, chalices, crosses, crosiers,
&c. The tabernacle, under which the
carried in procession on particular festi-
all of silver gilt, and of most exquisite
anship. It may be taken into seven thou-
eces, and is so heavy, that it requires thirty
carry it. Within this there is a vessel of
ld, (some of the first that was brought from
a,) which contains the consecrated bread.
; also a figure of the Virgin sitting upon a
med of precious stones, amongst which is
nd as large as a pigeon's egg. In short,
d require a volume to give a particular de-
n of this cathedral and all the curiosities of
ury.

cathedral of Compostella, dedicated to St.
or St. James the apostle, whom the Spa-
affirm to be buried in that city, is a strong
gnificent fabric, having a lofty cupola
l with four stately towers. The tabernacle
sitory over the altar is supported by six
nounted on as many columns; and the ef-
he great apostle is held up by four kings

Spain. The whole is of silver gilt, of the most curious workmanship, and enriched with proper ornaments. Here are six silver candlesticks, five feet high, presented by Philip III.; and about thirty silver lamps are kept continually burning in this church, besides forty or fifty wax tapers round the altar. As vast numbers of pilgrims resort hither out of devotion, there is a noble hospital built near the cathedral for the reception of the sick and indigent, where they are treated with great care and humanity.

Some persons are of opinion, that the cathedral of Seville, in which there is a mixture of the Gothic and Moorish style, has something in it that looks majestic beyond any other in the kingdom. It is certainly a very stately edifice, being four hundred and seven feet in length, two hundred and seventy in breadth, and one hundred and twenty-eight in height; and its roof is supported by two double rows of beautiful columns. The tower of this church is three hundred and fifty feet high, built of brick, with large windows to give light to the stair-case, the ascent of which is so easy, that a person may ride up it on horseback, or even in a chaise. It is terminated by a cupola, on the top of which is the figure of a woman in brass, that turns to point out the wind like a weather-vane. The inside of the church is adorned with statues, paintings, monuments, and other decorations; and the magnificent tabernacle on the high altar is of massy silver, weighing above six hundred pounds.

The cathedral of Leon is deservedly admired for the beauty and regularity of its architecture, the elegance and variety of its ornaments. It is likewise remarkable for the monuments of a

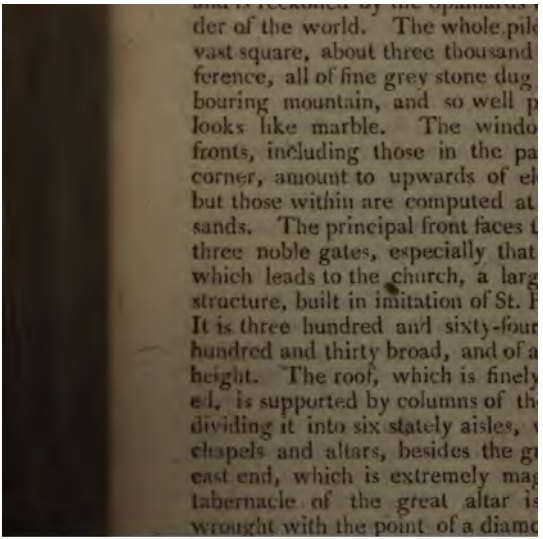
peror, thirty-seven kings, and other illustrious sonages there interred.

But of all the cathedrals in Spain, the most magcent is that of Cordova, which is still called Mesquita, having been originally a mosque, lt in the eighth century, by the famous Moorish g Abderhaman, and may be justly ranked ng the wonders of the world. It is six hund feet in length, and two hundred and fifty in dth; and the roof, which is surprisingly lofty, richly gilt, is supported by three hundred and y-five columns of fine marble. It has twenty- gates adorned with sculpture; and some of hapels, of which there are upwards of three dred, are particularly beautiful, being embelld with gilding, paintings, and other ornats.

o the sacred structures already mentioned, we t add the cathedral of St. Vincent in Lisbon, ch is a vast Gothic edifice, heavy and clumsy ed, but being seated on a hill, it makes a e appearance at a proper distance, when ped with the rest of the public buildings. at is deficient, however, in elegance and ity on the exterior, is made up by the richness s ornaments within, such as statues, paintings, utensils of gold and silver of exquisite workship, enriched with precious stones.

Ve now come to take a view of some of the l palaces, and first of the Escurial*, so called

This palace was built by Philip II. of Spain, in me- of a victory his forces obtained over the French near uintin in Picardy, in the year 1557, on St. Laurence's to the honour of which saint the king had made a to erect this stately edifice, in case his troops overthe enemy.


der of the world. The whole pile
vast square, about three thousand
ference, all of fine grey stone dug
bouring mountain, and so well p
looks like marble. The windo
fronts, including those in the pa
corner, amount to upwards of ei
but those within are computed at
sands. The principal front faces t
three noble gates, especially that
which leads to the church, a larg
structure, built in imitation of St. P
It is three hundred and sixty-four
hundred and thirty broad, and of a
height. The roof, which is finely
ed, is supported by columns of th
dividing it into six stately aisles,
chapels and altars, besides the gr
east end, which is extremely mag
tabernacle of the great altar is
wrought with the point of a diamo

which are said to amount to sixteen hundred,
ge, and executed by the most eminent mas-
Under the grand chapel is a large mauso-
r burying-place for the royal family, which
ed the Pantheon, being a rotunda, built
ne manner of that temple at Rome. The
t consists of more than fifty marble steps,
e gate that opens into it is of brass gilt, and
curious workmanship. The dome is lined
asper, intermixed with small plates of brass,
e pavement is likewise composed of squares
er and marble. Facing the entrance is a
chapel or oratory, adorned in the most
ious manner imaginable, particularly with
fix enriched with diamonds, and other pre-
ones. In the middle of this noble vault is
e brazen candlestick, supported by figures
els, and the four evangelists; of the same.
and in twenty-six niches, embellished with
hest ornaments, are placed as many urns or
ires of black marble, destined to receive the
s of the Spanish monarchs. The royal
ents, or what may be properly called the
, are large and stately, furnished in the most
icent manner, and adorned with every
hat is rich and beautiful. Throughout the
an attentive spectator must observe a va-
f marble, jasper, and other curious stones,
by the best masters, and in the grandest
and all the halls, galleries, stair-cases, &c.
ed with excellent paintings, together with
usion of fine hangings, plate, and other
urniture.—The monastery consists of five
or squares, one larger than the rest, each
n adorned with a marble fountain. The
cloister, which is two hundred and ten feet

itself, though inferior to the Escurial in elegancy of structure, exceeds it far in gardens and water-works, which are here in the highest perfection. It is situated in an island formed by the conflux of the Tagus and Xarama, and a large canal cut from one to another. A handsome terrace runs round the gardens, which are so well supplied with water from the Tagus, that they are never scorched by the solar heat, but retain a constant bloom and beautiful verdure. In a word, the great number of fountains, grottos, cascades, shady walks, and manner-houses, &c. render this palace the most charming of any in the kingdom, though the Escurial is most frequented by the royal family.

His catholic majesty's palace at Madrid is a spacious and magnificent edifice, consisting of several courts, with piazzas round them, and a great many gilded balconies, which make a handsome appearance. The royal apartments are very richly furnished, and adorned with fine tapestries, paintings, busts, statues, &c.

At a small distance from the town, upon the declivity of a hill, the king has another stately palace, called El Buen Retiro, or, the Good Retreat, which being his usual retirement in the heat of summer, or when wearied with the hurry of the city. It consists of a spacious square, flanked with pavilions at each corner, having a parterre and a beautiful fountain in the middle of it. The apartments are large and magnificent, furnished in the most elegant manner, and embellished with exquisite paintings and other ornaments. The park and gardens are perfectly paradisaical, having fine shady walks, canals, grottos, fountains, statues

and all the pleasing varieties that art and nature can produce, to form a delightful retirement.

We must not dismiss this subject, without taking notice of an ancient Moorish castle or palace, situated on a fine eminence, at Granada, which is still kept in good repair, and justly esteemed a wonder for its largeness and magnificence. This famous edifice appears like a citadel, being surrounded with a strong wall, fortified with towers and bastions, and is large enough to receive a garrison of forty thousand men. The grand court, which leads to the entrance, is paved with marble, and adorned with two fountains, from whence water is conveyed by pipes into the halls and chambers of the palace. The whole building is of free stone, but the inside of the walls are lined with marble, jasper, and porphyry; many of the cielings are gilt, and marked with hieroglyphical figures and inscriptions. But the most beautiful part of this structure is a spacious square called El Quadro de los Leones, which has a fine stone gallery running round it, supported by a hundred and seventeen columns of white marble. In the middle of the square is a large marble bason, supported by twelve figures of lions, which throw water out of their mouths incessantly. The park and gardens which lie on the declivity of the hill are very delightful; and the whole structure is an interesting monument of Moorish grandeur.

The late royal palace at Lisbon deserves to be mentioned among the rest, not only as a beautiful and stately fabric, but on account of its pleasant situation, having a charming prospect over the river Tagus, where it is so deep, that the largest ships can anchor before the windows of the pa-

ce. The apartments were well disposed, richly rnished, and adorned with fine tapestry, paintgs, and other decorations. In it were two galeries, about a hundred paces in length, in the rst and second stories, with balconies in the winows. In the third story was the royal library, hich contained a great number of valuable books n presses. Within the palace were also several arge rooms, where the cortes, or states, the counil of war, and the courts of justice assembled. The king's chapel was an elegant building, richly dorned, and shining with gold and azure, the very silver alone being valued at near a million terling. Adjoining to the palace was a square ourt, surrounded with a piazza, where the merchants usually met, and exposed their goods to sale.

This palace appeared with the utmost splendor, when it was suddenly destroyed by that dreadful earthquake, which happened on the first of November 1755. This circumstance will render it necessary to give some account of that terrible calamity, which we shall do from the observations of the reverend Mr. Clark, who was at Lisbon in the latter end of the year 1761. "We passed," says he, "through some streets, near a mile in length, where the houses were all fallen on each side, and lay in that undistinguished heap of ruin, into which they sunk at the first convulsive shock. Not that the reader is to imagine, that the greatest part of the city fell on that fatal morning; so far from it, that, I believe, not above one-fourth part of it was destroyed; for it prevailed more in one particular quarter than the rest; and there the *desolation* was almost universal, for there was *scarcely* a house or building that was not throw

ceived. Considering how much time since the earthquake, little has been proportion. They have built a custo arseual, a theatre, and some few othe All agree, that the fire occasioned mi havock than the earthquake. Thou inhabitants, unhappily, in the first c their fear, taking the ill-judged step o into the churches; the doors of which times shut by the violence of the crowd times locked by mistake, when the fir roofs of those buildings, most of these u ferers were destroyed; some by she that poured like a molten deluge upon others, by the fall of the roofs, and the dreadful conflagration. Imagination form a scene of confusion, horror, and dreadful than this. After the shocks the fire continued burning for several it is thought, that this was one princi their escaping the plague, as the put

t produced many changes, those among th
mercial parts of the city were not the leas
rkable. One, who yesterday was at the ev
nkruptcy, found himself to-day with his book
ed; and hundreds, who lived in ease an
ence, as soon as they had recovered from thei
panic, saw want and poverty stare them in th
"

bsequent to the period of Mr. Clark's visit
ever, the Portuguese have converted the tem
ry evil into a permanent benefit, by rebuild
heir streets on a superior plan, and obviating
great measure, that filthiness which was for
y a subject of animadversion with all fo
ners.

he most magnificent palace of the king o
ugal is situated at Mafra, in a sandy and bar
spot, in pursuance of a vow made by kin
V. to found a convent for the poorest friar
he kingdom. Upon enquiry, the meanes
ent appeared to be at Mafra, where twelv
iciscans lived together in a hut. In order t
mplish this vow, the king procured fro
e the draught of a building, that was greatl
ceed the Escurial in Spain, and this he accord
y erected. In the centre stands a templ
entirely of marble; and behind the choir is
e, endowed with a large revenue for two hun
capuchins, who officiate as chaplains. T
ight of this building, is a superb and spaciou
ce for the king, the royal family, and th
officers of the court. On the left, is anothe
ce for the patriarch and twenty-four canon
have the privilege of wearing mitres. Twelv
and people were employed in raising the
ures, which are said to have cost th

fourths of the royal treasure, and of the gold brought by the Brazil fleets. At the distance of a mile from the church stands an elegant house, encompassed by a small wood, which, in this sandy waste, has a fine effect. The palace at Mafra being seated near the sea, serves for a land-mark.

There is likewise a large and beautiful palace at Villa-Vitiosa, where, since the destruction of that at Lisbon, the court frequently resides. This palace has a park three leagues in circumference.

We shall now take notice of some remarkable buildings of a different kind in Spain. In the city of Madrid is a grand square, called the Placa Mayor, four hundred and thirty-six feet long, encompassed with noble piazzas, in the front of one hundred and thirty-six stately houses, built with the utmost uniformity; continued rows of balconies joining to each other, and no house varying in the least from the general form, either in the windows, balconies, or other ornaments. In this square are celebrated the bull-baitings, and many of the other public shows of Madrid, it being sufficiently spacious to contain fifty thousand spectators.

At Valladolid is likewise a great square, with a piazza, the exact model of that at Madrid, consisting of five hundred arches, and three hundred windows, all in full view, with three hundred and thirty stately gates leading into those buildings.

We shall conclude this article with an account of some of the most remarkable aqueducts and bridges in Spain. One of the most extraordinary structures of the former kind is the Segovian aqueduct, which extends to a small river called Rio Frio, that rises in the skirts of a pass in the moun-

, and takes from it as much water as would
a duct capable of containing a human body.
received into an arch of stone, at the distance
ve hundred paces from the city of Segovia, and
ce begins to run in the channel of the aque-
, which does not require an elevation of more
seventeen feet. The height gradually in-
ises as it comes to deeper ground, but without
iring more than one range of arches, till the
er has passed over sixty-five, where the arch
the height of thirty-nine feet, close to a Fran-
an convent. There beginning to wind from
to west, they require two ranges of arches, one
being put upon the other. In the part where
valley is lowest, the aqueduct is one hundred
two feet high; the channel enters by the bat-
ents of the walls, with an extreme elevation
the ground to the top of the arch; and the
duct extends through the middle of the city,
east to west, with an arched duct, so large
a man may walk in it; and from thence divid-
it extends to the public fountains, and the
ns of private houses. This structure consists
ne hundred and sixty-one arches of hewn
e; and was probably built by the ancient
ans. In two niches, on the highest part,
e formerly statues of Hercules; but these have
changed for those of our lady of St. Sebastian.
here is a handsome bridge over the Guadiana
adajoz, consisting of thirty arches, and above
hundred yards in length.—At Saragossa,
two noble bridges over the Ebro, the one of
e, the other of wood, which latter is reckoned
finest of the kind in Europe; and the
ge over the Manzanarez, at Madrid, built by

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